

SAFETY DATA SHEET

Cat# K267-50, Rapid Cytosolic and Particulate Fractionation Kit

SDS DATE: 20APR2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Rapid Cytosolic and Particulate Fractionation Kit
PRODUCT CODES: Cat# K267-50
MANUFACTURER: BioVision, Inc.
DIVISION:
ADDRESS: 155 S. Milpitas Blvd. Milpitas, CA 95035
EMERGENCY PHONE: 858-373-8066
CHEMTREC PHONE:
OTHER CALLS: 408-493-1800
FAX PHONE: 408-493-1801

SECTION 2: HAZARDS IDENTIFICATION

Component	Description	Volume	Safety Information
Cell suspension buffer	Proprietary Buffer	30 ml	No hazards
Cytosol releasing buffer	Contains digitonin	1 vial	See below
Oil Layer	liquid	1 vial	No hazards
Particulate layer	Liquid (40% glycerol)	1 vial	See below

digitonin:

Emergency Overview

OSHA Hazards: Target organ effect, Highly toxic by inhalation, Toxic by ingestion, Toxic by skin absorption

Target Organs: Heart

GHS Classification:

Acute toxicity, Oral (Category 3)

Acute toxicity, Inhalation (Category 2)

Acute toxicity, Dermal (Category 3)

GHS Label elements, including precautionary statements

Pictogram:



Signal word:

Danger

Hazard statement(s):

H301+H311 Toxic if swallowed or in contact with skin.

H330 Fatal if inhaled.

Precautionary statement(s):

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P284 Wear respiratory protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

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

HMIS Classification

Health hazard: 2

Chronic health hazard: *

Flammability: 0

Physical hazards: 0

NFPA Rating

Health Hazard: 2

Fire: 0

Reactivity Hazard: 0

Potential Health Effects

Inhalation: May be fatal if inhaled. May cause respiratory tract irritation.

Skin: Toxic if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Ingestion: Toxic if swallowed.

Glycerol:

Emergency Overview

OSHA Hazards: Target organ effect

Target Organs: Kidney

GHS Classification:

Skin irritation (Category 3)

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Eye irritation (Category 2B)
GHS Label elements, including precautionary statements
Pictogram: none
Signal word: none
Hazard statement(s): none
Precautionary statement(s): P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
HMIS Classification
Health hazard: 1
Chronic Health Hazard: *
Flammability: 1
Physical hazards: 0
NFPA Rating
Health hazard: 1
Fire: 1
Reactivity Hazard: 0
Potential Health Effects
Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.
Ingestion: May be harmful if swallowed.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	EC-No.	Molecular Weight	Chemical Formula
digitonin	11024-24-1	234-255-6	1229.34	C ₅₆ H ₉₂ O ₂₉
glycerol	56-81-5	200-289-5	92.09	HOCH ₂ CH(OH)CH ₂ OH

SECTION 4: FIRST AID MEASURES

General Inhalation | Normal use of this product does not pose an inhalation hazard. However, should respiratory tract irritation develop, discontinue use and remove to fresh air. Get medical attention if irritation or other symptoms develop or persist.
Skin | Should irritation develop, discontinue use. Wash affected skin thoroughly with soap and water. Get medical attention if irritation or other symptoms develop or persist.
Eye | Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Ingestion | If swallowed, DO NOT induce vomiting. Get medical attention immediately.

SECTION 5: FIRE-FIGHTING MEASURES

Digitonin:
Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.
Hazardous combustion products: Hazardous decomposition products formed under fire conditions— see section 10.
Further information: Use water spray to cool unopened containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods for cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature: room temperature

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Components	CAS-No.	Value	Control parameters	Basis
Glycerol	56-81-5	TWA	10 mg/m ³	USA. American Conference of Governmental and Industrial Hygienists; Threshold Limit Values for Chemical Substances in the Work Environment;

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				Annual Reports for the Year 2004: Committees on Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs).
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Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Digitonin	Glycerol
Appearance:	White odorless solid	Clear liquid
pH:	Not applicable	5.5-8
Water Solubility:	10g/L	Soluble
Other Solubility:	No data available	No data available
Boiling Point (°C):	No data available	182 °C (360 °F)
Melting Point (°C):	240°C	20 °C (68 °F)
Flash Point (°C):	No data available	160 °C (320 °F)
Ignition Temp. (°C):	No data available	370 °C (698 °F)
Density:	No data available	1.25 g/ml

SECTION 10: STABILITY AND REACTIVITY

Property	digitonin
Chemical stability:	Stable under recommended storage conditions
Conditions to avoid:	Not applicable
Materials to avoid:	Not applicable
Hazardous decomposition products:	In the event of fire: See section 5

SECTION 11: TOXICOLOGICAL INFORMATION

Digitonin:

Acute toxicity: LD50 Oral – rat – 50 mg/kg

LD50 Intravenous – rat – 4 mg/kg

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity – single exposure (GHS): no data available

Specific target organ toxicity – repeated exposure (GHS): no data available

Aspiration hazard: no data available

Potential Health Effects

Inhalation: Fatal if inhaled. May cause respiratory tract irritation.

Skin: Toxic if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

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Ingestion: Toxic if swallowed.

Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional information: RTECS: IH2050050

SECTION 12: ECOLOGICAL INFORMATION

digitonin: No additional information available

SECTION 13: DISPOSAL CONSIDERATIONS

Product: Observe all federal, state, and local environmental regulations.

Contaminated packaging: avoid release to the environment

SECTION 14: TRANSPORT INFORMATION

Digitonin:

DOT (US): UN-number: 3462 Class: 6.1 Packing group: III;
Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Digitonin)
Marine pollutant: No; Poison Inhalation Hazard: No
IMDG: UN-number: 3462 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S. (DIGITONIN)
Marine pollutant: No
IATA: UN-number: 3462 Class: 6.1 Packing group: III
Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Digitonin)

SECTION 15: REGULATORY INFORMATION

OSHA Hazards: Digitonin: Target organ effect, Highly toxic by inhalation, Toxic by ingestion, Toxic by skin absorption

SARA 302 Components: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: Digitonin: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components: Glycerol, CAS-No. 56-81-5; Revision Date: 2007-03-01

Pennsylvania Right To Know Components: digitonin, CAS-No. 11024-24-1

Glycerol, CAS-No. 56-81-5; Revision Date: 2007-03-01

New Jersey Right To Know Components: digitonin, CAS-No. 11024-24-1

Glycerol, CAS-No. 56-81-5; Revision Date: 2007-03-01

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Component	Risk Phrases	Safety Phrases
Digitonin	R23/24/25	S22, S28, S36/37, S45
Glycerol	--	S24/25

SECTION 16: OTHER INFORMATION:

DISCLAIMER:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. BioVision, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.