

Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name: AnaPrep Blood DNA Extraction Kit 200 and 1200
AnaPrep Tissue DNA Extraction Kit
AnaPrep Cultured Cell Extraction Kit

Catalog Number: Z1322001, Z1322002, Z1322004, & Z1322005

Manufacturer: Biochain Inst., Inc. 39600 Eureka Drive, Newark, CA 94560, USA

Contact: 510-783-8588 (Tel) or 510-783-5386 (Fax), Info@biochain.com, www.biochain.com

Validation Date: 01/01/2014

MSDS#

Component/Item (and Parts number if listed)

Proteinase K, Lysis buffer 1, binding buffer 1, wash buffer 1, wash buffer 2, wash buffer 3, elution buffer 1, and elution buffer 2.

Section 2. Hazards Identification

Review approved and the most current institutional guideline, protocol, SOP(s) and MSDS(s) for the proper handling of institutional materials/equipment associated with the use of this BCI product.

Primary Routes of Entry:

Skin Absorption (**No**); Dermal/skin contact (**Yes**); Eye contact (**Yes**); Inhalation (**No**); Ingestion (**Yes**); Chronic Exposure (**No**).

Medical Conditions Aggravated by Exposure: Not available.

Potential Acute Health Effects: Adverse health effects are not expected from the use of this product.

Carcinogenic Effects: Not listed by NTP, IARC or OSHA.

Mutagenic Effects: Not available.

Teratogenic Effects: Not available.

Section 3. Composition and Information on Hazardous (OSHA) Ingredients

.Proteinase K:	proteinase K (CAS-No. 39450-01-6)	<5.00%
	Glycerol (CAS-No. 56-81-5)	50%

Section 4. First Aid Measures

If inhaled move person to area with fresh air. Consult a physician

In case of eye contact wash affected area with water for at least 15 minutes. Consult a physician.

In case of skin contact wash affected area with soap and plenty of water. Consult a physician.

If swallowed rinse mouth with water for a conscious person. Consult a physician.

Section 5. Fire Fighting Measures

Suitable extinguish media: use water spray, dry extinguishing chemical or carbon dioxide

Section 6. Accidental Release Measures

If released or spilled, absorb on neutral material. Wash area thoroughly.

Environmental precautions: do not let product enter drains. Dispose in suitable closed containers.

Section 7. Handling and Storage

See User's Manual or Certificate of Analysis for storage information. Take measures against electrostatic loading or exhaust fumes at source.

Section 8. Exposure Controls and Personal Protection

Effects of Overexposure: N/A

Ventilation: General ventilation

Eye Protection: Use general eye protection-goggles.

Wear appropriate protective clothing and gloves.

Respiratory Protection: None needed

Protective Glove: General lab safe gloves

Section 9. Physical and Chemical Properties

Appearance: Solution.

Boiling Point: N/A

Specific Gravit: N/A

Vapor Density & Pressure: N/A

Solubility in H₂O: Soluble

Section 10. Stability and Reactivity

Stability and Reactivity: The product is stable

Incompatibility: reacts with acids to form toxic gases

Hazardous Decomposition Products: N/A

Section 11. Toxicological Information

Glycerol

Oral toxicity: LD50 rat 12.600 mg/kg

LD50 mouse 4.090 mg/kg

LD50 guinea pig 7.750 mg/kg

Toxicity (inhalation): LC50 rat 1 h > 570 mg/m³ (1 h)

Toxicity (skin contact): LD50 rabbit > 10.000 mg/kg

Toxicity (others): LD50 subcutane rat 100 mg/kg

LD50 subcutane mouse 91 mg/kg

LD50 intravenous rat 5.566 mg/kg

LD50 intravenous mouse 4.250 mg/kg

LD50 intraperitoneal rat 4.420 mg/kg

LD50 intraperitoneal mouse 8.700 mg/kg

Section 12. Ecological Information

Water hazard class: 2 hazardous to water and ground Self-classification

Proteinase K

Glycerol

Toxicity to fish : LC50 *Leuciscus idus* > 10.000 mg/l

LC50 *Carassius auratus* (Goldfish) > 5.000 mg/l (2 d)

Toxicity to algae : IC5 *Scenedesmus quadricauda* > 10.000 mg/l (168 h)

Toxicity to bacteria: EC5 *Pseudomonas putida* > 10.000 mg/l (16 h)

Toxicity to daphnia: EC50 *Daphnia magna* > 10.000 mg/l (24 h)

Value log P(o/w): -2,66

Biodegradability: > 60 % 28 d Closed bottle test

71 % 5 d BSB method

95 % COD (chemical oxygen demand)

Section 13. Disposal Considerations

Please consult local, state and federal regulation on additional guidance on disposal.

Waste disposal route: Can be sent to an incineration plant in accordance with local regulations.

Disposal of empty packaging: Empty packaging can be disposed of via local recycling channels.

Section 14. Transport Information

14.1 UN Number: Not relevant

14.2 UN proper shipping name: Not relevant

14.3 Transport hazard class (es):

ADR: Not classified

IMDG: Not classified

ICAO/IATA: Not classified

RID: Not classified

DOT: Not classified

14.4 Packaging group: Not applicable

14.5 Environmental hazards: Not relevant

14.6 Special precautions for user: Not special precautions

14.7 This product is safe under IATA DGR 55th Edition 2014.

Section 15. Regulatory Information

Labelling according to EC-Directives

Note: This product must be labeled in accordance with EEC directive 67/548 and 99/45.

Hazard symbol: Xn Harmful

Warnings: R36/37/38 Irritating to eyes, respiratory system and skin.

R42/43 May cause sensitization by inhalation and skin contact.

Safety advice: S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Section 16. Other Information

Notice to Reader

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N/A - Not applicable or no information available.