Cytoskeleton, Inc.

#### **REVISED 7.24.18**

## MATERIAL SAFETY DATA SHEET

#### SECTION 1. CHEMICAL IDENTIFICATION

#### CATALOG/PRODUCT#: FNR03

NAME: FIBRONECTIN, ISOLATED FROM BOVINE PLASMA, LABELED WITH BIOTIN

**USE:** LABORATORY CHEMICALS

#### MANUFACTURER/SUPPLIER:

CYTOSKELETON INC. 1830 S. Acoma St. Denver, CO 80223 PHONE: 303-322-2254 FAX: 303-322-2257

24H EMERGENCY TOLL-FREE NUMBER: CALL INFOTRAC DAY OR NIGHT WITHIN USA AND CANADA: 1-800-535-5053 OUTSIDE USA AND CANADA: +1 352-323-3500 (COLLECT CALLS ACCEPTED)

SECTION 2. HAZARDS IDENTIFICATION

## **EMERGENCY OVERVIEW**

**OSHA HAZARDS** THIS PRODUCT IS NOT CONSIDERED HAZARDOUS

**GHS CLASSIFICATION** THIS PRODUCT IS NOT CONSIDERED HAZARDOUS

## GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM	NONE
SIGNAL WORD	NONE

HAZARD STATEMENTS NONE

PRECAUTIONARY STATEMENTS NONE

**NFPA RATINGS (SCALE 0-4)** FIRE = 0HEALTH = 0REACTIVITY = 0

HMIS RATINGS

HEALTH = 0FIRE = 0REACTIVITY = 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

SUCROSE

SUCKUSE	EINECS#: 200-334-9	3%
BIOTIN-XX SUCCINIMIDYL ESTER	CAS#: 89889-52-1 EINECS#:NONE	<1%
FIBRONECTIN	CAS#: 86088-83-7 EINECS#: 289-149-2	<u>&gt;</u> 95%

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## SECTION 4. FIRST-AID MEASURES

**AFTER INHALATION:** SUPPLY FRESH AIR. IF NOT BREATHING, IF BREATHING IS IRREGULAR OR IF RESPIRATORY ARREST OCCURS, PROVIDE ARTIFICIAL RESPIRATION.

AFTER SKIN CONTACT: IMMEDIATELY WASH SKIN WITH SOAP AND RINSE WITH COPIOUS AMOUNTS OF WATER.

AFTER EYE CONTACT: CHECK FOR AND REMOVE ANY CONTACT LENSES. RINSE OPENED EYE FOR AT LEAST 15 MINUTES UNDER RUNNING WATER. AFTER SWALLOWING: WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.

WASH CONTAMINATED CLOTHING BEFORE REUSE.

SECTION 5. FIREFIGHTING MEASURES

**CONDITIONS OF FLAMMABILITY** 

NOT FLAMMABLE OR COMBUSTIBLE **EXTINGUISHING MEDIA** SUITABLE EXTINGUISHING AGENTS: USE DRY CHEMICAL POWDER, WATER SPRAY, ALCOHOL-RESISTANT FOAM OR CARBON DIOXIDE. **ADVICE FOR FIREFIGHTERS PROTECTIVE EQUIPMENT:** MOUNT RESPIRATORY PROTECTIVE DEVICE PREVENT CONTACT WITH SKIN, FACE AND EYES HAZARDOUS COMBUSTION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS: CARBON OXIDES, NITROGEN OXIDES, SULPHUR OXIDES

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:** WEAR PROTECTIVE CLOTHING, RESPIRATOR, CHEMICAL SAFETY GOGGLES, GLOVES.

**ENVIRONMENTAL PRECAUTIONS**: DILUTE WITH PLENTY OF WATER. DO NOT ALLOW TO ENTER SEWERS/SURFACE OR GROUND WATER. **METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP**: ABSORB WITH LIQUID-BINDING MATERIAL (SAND, DIATOMITE, ACID BINDERS, UNIVERSAL BINDERS, SAWDUST). DISPOSE CONTAMINATED MATERIAL AS WASTE ACCORDING TO SECTION 13. ENSURE ADEQUATE VENTILATION. **REFERENCE TO OTHER SECTIONS:** SEE SECTION 8 FOR INFORMATION ON PERSONAL PROTECTION EQUIPMENT. SEE SECTION 13 FOR DISPOSAL INFORMATION.

#### SECTION 7. HANDLING AND STORAGE

#### HANDLING

**PRECAUTIONS FOR SAFE HANDLING**: ENSURE GOOD VENTILATION/EXHAUSTION AT THE WORKPLACE. WEAR APPROPRIATE PROTECTIVE CLOTHING (SEE SECTION 8). DO NOT RE-USE CONTAINER. DO NOT EAT, DRINK OR SMOKE IN AREAS WHERE THIS PRODUCT IS HANDLED, STORED OR PROCESSED. WASH HANDS AFTER WORKING WITH MATERIAL. **INFORMATION ABOUT PROTECTION AGAINST EXPLOSIONS AND FIRES**: STORE IN CONTAINER PROTECTED FROM DIRECT SUNLIGHT IN A DRY, COOL, WELL-VENTILATED PLACE. STORE AT -70 DEGREES C OR 4 DEGREES C WITH DESICCANT. ELIMINATE ALL IGNITION SOURCES AND SEPARATE FROM OXIDIZING MATERIALS. KEEP CONTAINERS CLOSED AND SEALED.

# CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES STORAGE

**REQUIREMENTS TO BE MET BY STOREROOMS AND RECEPTACLES**: STORE AT 2-8°C WITH DESICCANT (OR -70 DEGREES C). KEEP CONTAINER TIGHTLY CLOSED AND SEALED UNTIL READY FOR USE. STORE DESICCATED. **FURTHER INFORMATION ABOUT STORAGE CONDITIONS**: KEEP RECEPTACLE TIGHTLY SEALED AND PROTECTED FROM LIGHT. LIGHT SENSITIVE.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## PERSONAL PROTECTIVE EQUIPMENT

## GENERAL PROTECTIVE AND HYGIENIC MEASURES

KEEP AWAY FROM FOODSTUFFS, BEVERAGES AND FEED WASH HANDS BEFORE BREAKS AND AT THE END OF WORK IMMEDIATELY REMOVE ALL SOILED AND CONTAMINATED CLOTHING AVOID CONTACT WITH THE EYES AND SKIN

## **BREATHING EQUIPMENT**

SHORT TERM FILTER DEVICE: FILTER P1

#### DO NOT BREATHE. USE MECHANICAL EXHAUST SYSTEM

## **PROTECTION OF HANDS PROTECTIVE GLOVES.**

THE GLOVE MATERIAL HAS TO BE IMPERMEABLE AND RESISTANT TO THE PRODUCT/SUBSTANCE/PREPARATION. AS THE PRODUCT IS A PREPARATION OF SEVERAL SUBSTANCES, THE RESISTANCE OF THE GLOVE MATERIAL CANNOT BE CALCULATED IN ADVANCE AND THEREFORE HAS TO BE CHECKED PRIOR TO APPLICATION. NO RECOMMENDATION CAN BE GIVEN FOR THE GLOVE MATERIAL FOR THIS PRODUCT. SELECT GLOVE MATERIALS BASE ON PENETRATION TIMES, RATES OF DIFFUSION AND DEGRADATION OF MATERIAL.

#### MATERIAL OF GLOVES

THE SELECTION OF SUITABLE GLOVES DEPENDS NOT ONLY ON THE MATERIAL BUT ON QUALITY OF MATERIAL AND VARIES FROM MANUFACTURER TO MANUFACTURER.

## PENETRATION TIME OF GLOVE MATERIAL

THE EXACT BREAK TROUGH TIME HAS TO BE FOUND OUT BY THE MANUFACTURER OF THE PROTECTIVE GLOVES AND HAS TO BE OBSERVED.

FOR THE PERMANENT CONTACT OF A MAXIMUM OF 15 MINUTES, GLOVES MADE OF THE FOLLOWING MATERIALS ARE SUITABLE: NEOPRENE GLOVES

EYE PROTECTION: TIGHTLY SEALED GOGGLES

## BODY PROTECTION: PROTECTIVE WORK CLOTHING

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES GENERAL INFORMATION

FORM: SOLID (LYOPHILIZED POWDER) COLOR: N/A CHANGE IN CONDITION MELTING POINT/MELTING RANGE: N/A BOILING POINT/BOILING RANGE: N/A FLASH POINT: N/A. SELF-IGNITING: PRODUCT IS NOT SELF-IGNITING DANGER OF EXPLOSION: PRODUCT IS NOT EXPLOSIVE. DENSITY: NOT DETERMINED SOLUBILITY IN/MISCIBILITY WITH WATER: FULLY MISCIBLE

#### SECTION 10. STABILITY AND REACTIVITY

**REACTIVITY CHEMICAL STABILITY:** THE PRODUCT IS STABLE UNDER RECOMMENDED STORAGE CONDITIONS. **THERMAL DECOMPOSITION/CONDITIONS TO BE AVOIDED**: AVOID CREATION OF DUST WHEN HANDLING AND AVOID ALL POSSIBLE SOURCES OF IGNITION. PREVENT DUST ACCUMULATION. REACTIVE OR INCOMPATIBLE WITH STRONG OXIDIZING MATERIALS.

POSSIBILITY OF HAZARDOUS REACTIONS: NO DANGEROUS REACTIONS KNOWN

HAZARDOUS DECOMPOSITION PRODUCTS: NO DANGEROUS PRODUCTS KNOWN

SECTION 11. TOXICOLOGICAL INFORMATION

#### INFORMATION ON TOXICOLOGICAL EFFECTS

TO THE BEST OF OUR KNOWLEDGE, THE TOXICOLOGICAL PROPERTIES OF THIS PRODUCT HAVE NOT BEEN THOROUGHLY INVESTIGATED.

## ACUTE TOXICITY

ORAL LD50: NO DATA AVAILABLE INHALATION LC50: NO DATA AVAILABLE DERMAL LD50: NO DATA AVAILABLE 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**: 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, NTP OR OSHA.

**REPRODUCTIVE TOXICITY** NO DATA AVAILABLE **TERATOGENICITY** NO DATA AVAILABLE

**SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (GLOBALLY HARMONIZED SYSTEM)** NO DATA AVAILABLE

**SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE (GLOBALLY HARMONIZED SYSTEM)** NO DATA AVAILABLE

INHALATION	MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY
	TRACT IRRITATION.
INGESTION	MAY BE HARMFUL IF SWALLOWED.
SKIN	MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY
	CAUSE SKIN IRRITATION.
EYES	MAY CAUSE EYE IRRITATION.

#### **SYNERGISTIC EFFECTS** NO DATA AVAILABLE

#### **SECTION 12. ECOLOGICAL INFORMATION**

NO DATA AVAILABLE. NO KNOWN SIGNIFICANT EFFECTS OR CRITICAL HAZARDS.

**SECTION 13. DISPOSAL CONSIDERATIONS** 

#### WASTE TREATMENT METHODS

CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL. DISPOSAL OF THIS PRODUCT, SOLUTIONS AND ANY BY-PRODUCTS SHOULD AT ALL TIMES COMPLY WITH THE REQUIREMENTS OF ENVIRONMENTAL PROTECTION AND WASTE DISPOSAL LEGISLATION AND ANY REGIONAL LOCAL AUTHORITY REQUIREMENTS. AVOID DISPERSAL OF SPILLED MAERIAL AND RUNOFF AND CONTACT WITH SOIL, WATERWAYS, DRAINS AND SEWERS. OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

DISPOSE OF CONTAMINATED PACKAGING AS UNUSED PRODUCT

**SECTION 14. TRANSPORT INFORMATION** 

DOT CLASSIFICATION: THIS PRODUCT IS CONSIDERED TO BE NON-HAZARDOUS FOR TRANSPORT. NOT REGULATED

IATA-DGR CLASSIFICATION: THIS PRODUCT IS CONSIDERED TO BE NON-HAZARDOUS FOR TRANSPORT. NOT REGULATED

IMDG CLASSIFICATION: THIS PRODUCT IS CONSIDERED TO BE NON-HAZARDOUS FOR TRANSPORT. NOT REGULATED

**SECTION 15. REGULATORY INFORMATION** 

#### UNITED STATES REGULATORY INFORMATION

NO KNOWN OSHA HAZARDS AT THE PRESENT CONCENTRATIONS

SARA (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986-USA) SECTION 302/304 (40CFR355.30/40CFR355.40): NONE OF THE INGREDIENTS IS LISTED.

SARA (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986-USA) SECTION 302/304/311/312: NO PRODUCTS WERE LISTED

SARA (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986-USA) SECTION 313:

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.

#### CANADA REGULATORY INFORMATION

WHMIS CLASSIFICATION: NOT CONTROLLED

#### **EU REGULATORY INFORMATION**

THIS PRODUCT IS NOT CLASSIFIED ACCORDING TO EU LEGISLATION.

#### PA AND NJ RIGHT TO KNOW COMPONENTS FIBRONECTIN

CAS#: 86088-83-7

#### CALIFORNIA PROP. 65 COMPONENTS

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE HARM.

#### **SECTION 16. OTHER INFORMATION**

THIS INFORMATION IS BASED ON OUR PRESENT KNOWLEDGE. HOWEVER, THIS SHALL NOT CONSTITUTE A GUARANTEE FOR ANY SPECIFIC PRODUCT FEATURES AND SHALL NOT ESTABLISH A LEGALLY VALID CONTRACTUAL RELATIONSHIP. THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT, BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. CYTOSKELETON INC. SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM CONTACT WITH THE ABOVE PRODUCT.

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