RD SYSTEMS a biotechne brand

1.	IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING					
1.1	Product Identifiers					
	Product Name:	Recombinant Mouse sFRP-2 Protein, CF				
	Catalog Number:	1169-FR/CF				
1.2	Relevant identified us	es of the substance or mixture and uses advis	ed against			
	Identified Uses: For Research Use Only					
1.3	Details of the supplier of the safety data sheet					
	Company:	R&D Systems, Inc. a Bio-Techne Brand	Telephone:	1-800-343-7475		
		614 McKinley Place NE	Fax:	1-612-656-4400		
		Minneapolis, MN 55413, USA	Internet:	www.rndsystems.com		
			Email address:	info@bio-techne.com		
	Canada:	461 North Service Rd West	Telephone:	1-855-668-8722		
		Unit B37	Fax:	902-827-6402		
		Oakville, ON L6M 2V5	Email address:	Canada.inquiries@bio-techne.com		
	United Kingdom:	19 Barton Lane	Telephone:	44 (0)1235 529449		
		Abingdon Science Park	Fax: Email address:	44 (0)1235 533420		
1.4		Abingdon, OX14 3NB	Eniali address.	info.emea@bio-techne.com		
1.4	Emergency Telephone					
	Emergency Tel:	US: 612-379-2956 or 800-343-7475 / Euro	ppe: +44(0)1235-529449			
_	HAZARDS IDENTIFICATION					
2.						
2.						
2. 2.1	Classification of the s	ubstance or mixture				
2.1	Classification of the s This substance does no	ubstance or mixture	tives 67/548/EEC, 1999/45	5/EC, 1272/2008 [CLP], GHS or 29 CFR 1910.1200 [OSHA].		
	Classification of the s This substance does no Label Elements	ubstance or mixture ot meet the classification criteria of the EC Direc				
2.1 2.2	Classification of the s This substance does no Label Elements The product does not r	ubstance or mixture				
2.1	Classification of the s This substance does no Label Elements	ubstance or mixture ot meet the classification criteria of the EC Direc				
2.1 2.2	Classification of the s This substance does no Label Elements The product does not r Other Hazards - None	ubstance or mixture ot meet the classification criteria of the EC Direc				
2.1 2.2 2.3	Classification of the s This substance does no Label Elements The product does not r Other Hazards - None	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct				
2.1 2.2 2.3 3.	Classification of the s This substance does no Label Elements The product does not r Other Hazards - None COMPOSITION/INFO	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct				
2.1 2.2 2.3 3.	Classification of the s This substance does no Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct				
2.1 2.2 2.3 3. 3.1	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct RMATION ON INGREDIENTS	ives or respective national			
2.1 2.2 2.3 3. 3.1	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct RMATION ON INGREDIENTS	ives or respective national	laws.		
2.1 2.2 2.3 3. 3.1	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct RMATION ON INGREDIENTS	ives or respective national	laws.		
2.1 2.2 2.3 3. 3.1 3.2	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures This product does not o	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct PRMATION ON INGREDIENTS	ives or respective national	laws.		
2.1 2.2 3. 3.1 3.2 4.	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures This product does not of FIRST AID MEASURE	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct PRMATION ON INGREDIENTS	ives or respective national	laws.		
2.1 2.2 3. 3.1 3.2 4.	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures This product does not of FIRST AID MEASURI Description of first aid General Advice	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct PRMATION ON INGREDIENTS	ives or respective national	laws.		
2.1 2.2 3. 3.1 3.2 4.	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures This product does not of FIRST AID MEASURI Description of first aid General Advice	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct RMATION ON INGREDIENTS	ives or respective national	laws.		
2.1 2.2 3. 3.1 3.2 4.	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures This product does not of FIRST AID MEASURE Description of first aid General Advice Consult a doctor and s If Inhaled	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct PRMATION ON INGREDIENTS	ives or respective national	laws.		
2.1 2.2 3. 3.1 3.2 4.	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures This product does not of FIRST AID MEASURI Description of first aid General Advice Consult a doctor and s if Inhaled Remove to fresh air an In Case of Skin Contac	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct PRMATION ON INGREDIENTS contain hazardous chemicals at concentrations of ES d measures how this safety data sheet. d monitor breathing. If breathing becomes difficuents	ives or respective national	laws.		
2.1 2.2 3. 3.1 3.2 4.	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures This product does not of FIRST AID MEASURI Description of first aid General Advice Consult a doctor and si If Inhaled Remove to fresh air an In Case of Skin Contact	ubstance or mixture ot meet the classification criteria of the EC Direct meed to be labelled in accordance with EC direct PRMATION ON INGREDIENTS contain hazardous chemicals at concentrations of ES I measures how this safety data sheet. d monitor breathing. If breathing becomes difficu- ct with copious amounts of soap and water for at	ives or respective national of 1% or greater. This prod It, give oxygen. If breathin least 15 minutes. Remove	laws. luct is not known to contain carcinogens at concentrations of 0.1% or greater. g stops, give artificial respiration. Consult a doctor.		
2.1 2.2 3. 3.1 3.2 4.	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures This product does not of FIRST AID MEASURI Description of first aid General Advice Consult a doctor and s If Inhaled Remove to fresh air an In Case of Skin Contac Immediately wash skin In Case of Eye Contac Flush with copious and	ubstance or mixture ot meet the classification criteria of the EC Direct meed to be labelled in accordance with EC direct mRMATION ON INGREDIENTS contain hazardous chemicals at concentrations of ES if measures how this safety data sheet. d monitor breathing. If breathing becomes difficu- t with copious amounts of soap and water for at t punts of water for at least 15 minutes. Consult a	ives or respective national of 1% or greater. This prod lt, give oxygen. If breathin least 15 minutes. Remove doctor.	laws. luct is not known to contain carcinogens at concentrations of 0.1% or greater. g stops, give artificial respiration. Consult a doctor.		
2.1 2.2 2.3 3. 3.1 3.2 4. 4.1	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures This product does not of FIRST AID MEASURI Description of first aid General Advice Consult a doctor and s If Inhaled Remove to fresh air an In Case of Skin Contact Flush with copious amount If Swallowed Rinse mouth with wate	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct PRMATION ON INGREDIENTS contain hazardous chemicals at concentrations of ES if measures how this safety data sheet. d monitor breathing. If breathing becomes difficu- ct with copious amounts of soap and water for at bounts of water for at least 15 minutes. Consult a r. Do not induce vomiting unless directed to do s	ives or respective national of 1% or greater. This prod lt, give oxygen. If breathin least 15 minutes. Remove doctor.	laws.		
2.1 2.2 2.3 3. 3.1 3.2 4. 4.1	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures This product does not of FIRST AID MEASURI Description of first aid General Advice Consult a doctor and si If Inhaled Remove to fresh air an In Case of Skin Contac Immediately wash skin In Case of Eye Contact Flush with copious amount f Swallowed Rinse mouth with wate Most important sympti	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct meed to be labelled in accordance with EC direct meed to be labelled in accordance with EC direct memory of the experimental of the experimental memory of the experimental of the experimental contain hazardous chemicals at concentrations of ES is measures how this safety data sheet. d monitor breathing. If breathing becomes difficu- et with copious amounts of soap and water for at t bounts of water for at least 15 minutes. Consult a r. Do not induce vomiting unless directed to do s coms and effects, both acute and delayed	ives or respective national of 1% or greater. This prod lt, give oxygen. If breathin least 15 minutes. Remove doctor. so by medical personnel. N	laws.		
2.1 2.2 3. 3.1 3.2 4. 4.1 4.2	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures This product does not of FIRST AID MEASURI Description of first aid General Advice Consult a doctor and s if Inhaled Remove to fresh air an In Case of Skin Contac Immediately wash skin In Case of Eye Contact Flush with copious amo if Swallowed Rinse mouth with wate Most important sympt To the best of our know	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct PRMATION ON INGREDIENTS contain hazardous chemicals at concentrations of ES d measures how this safety data sheet. d monitor breathing. If breathing becomes difficuent t with copious amounts of soap and water for at t punts of water for at least 15 minutes. Consult a r. Do not induce vomiting unless directed to do s oms and effects, both acute and delayed viedge, the chemical, physical and toxicological p	ives or respective national of 1% or greater. This prod lt, give oxygen. If breathin least 15 minutes. Remove doctor. so by medical personnel. N	laws.		
2.1 2.2 3. 3.1 3.2 4.	Classification of the s This substance does not Label Elements The product does not r Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures This product does not of FIRST AID MEASURI Description of first aid General Advice Consult a doctor and s If Inhaled Remove to fresh air an In Case of Skin Contac Immediately wash skin In Case of Eye Contact Flush with copious and If Swallowed Rinse mouth with wate Most important sympt To the best of our know	ubstance or mixture ot meet the classification criteria of the EC Direct need to be labelled in accordance with EC direct meed to be labelled in accordance with EC direct meed to be labelled in accordance with EC direct memory of the experimental of the experimental memory of the experimental of the experimental contain hazardous chemicals at concentrations of ES is measures how this safety data sheet. d monitor breathing. If breathing becomes difficu- et with copious amounts of soap and water for at t bounts of water for at least 15 minutes. Consult a r. Do not induce vomiting unless directed to do s coms and effects, both acute and delayed	ives or respective national of 1% or greater. This prod lt, give oxygen. If breathin least 15 minutes. Remove doctor. so by medical personnel. N properties have not been ti ded	laws.		

5.1 Extinguishing Media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

In combustion, may emit toxic fumes.

5.3 Precautions for fire-fighters

Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

6. ACCIDENTIAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust

6.2 Environmental precautions

or gas.

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover spillage with suitable absorbent material. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4 Reference to other sections

For required PPE see section 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use.

7.3 Specific end uses

Not applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate Engineering Controls

Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

Personal Protective Equipment

Eye / Face Protection

Use appropriate safety glasses.

Skin Protection

Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly after handling.

Body Protection

Wear appropriate protective clothing.

Respiratory Protection

If risk assessment indicates necessary, use a suitable respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Lyophilized white powder or clear liquid	Vapor Pressure	No data available
Odor	Little to none	Vapor Density	No data available.
Odor Threshold	No data available.	Relative Density	No data available.
pH	No data available.	Solubility(ies)	No data available.
Melting / Freezing Point	No data available.	Partition Coefficient	No data available.
Boiling Point / Range	No data available.	Autoignition Temperature	No data available.
Flash Point	No data available.	Decomposition Temperature	No data available.
Evaporation Rate	No data available.	Viscosity	No data available.
Flammability (Solid, Gas)	No data available.	Explosive Properties	No data available.
Upper / Lower Flammability or Explosive	No data available.	Oxidizing Properties	No data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to avoid

Heat. moisture.

10.5 Incompatible materials

Strong acids/alkalis, strong oxidising/reducing agents.

10.6 Hazardous decomposition products

Strong acids/alkalis, strong oxidising/reducing agents.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

Classified based on available data

Skin Corrosion / Irritation

Classified based on available data

Serious Eye Damage / Irritation

Classified based on available data

Respiratory or Skin Sensitization

Classified based on available data

Germ Cell Mutagenicity

Classified based on available data

Carcinogenicity

Classified based on available data

Reproductive Toxicity

Classified based on available data

Specific Target Organ Toxicity - Single Exposure

Classified based on available data

Specific Target Organ Toxicity - Repeated Exposure

Classified based on available data

Aspiration Hazard

Classified based on available data

Symptoms / Routes of Exposure

Inhalation:	There may be irritation of the throat with a feeling of tightness in the chest.
Ingestion:	There may be irritation of the throat.
Skin:	There may be mild irritation at the site of contact.
Eyes:	There may be irritation and redness.
Delayed / Immediate Effects:	No known symptoms.

Additional Information

Classified based on available data

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

ity - Single Exposure e data

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with national, regional, or local legislation.

Contaminated Packaging

Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with national, regional, or local legislation.

14. TRANSPORT INFORMATION

Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID, DOT and IATA.

14.1 UN-Number

Does not meet the criteria for classification as hazardous for transport.

14.2 UN proper shipping name

Does not meet the criteria for classification as hazardous for transport.

14.3 Transport hazard class(es)

Does not meet the criteria for classification as hazardous for transport.

14.4 Packaging group

Does not meet the criteria for classification as hazardous for transport.

14.5 Environmental hazards

Does not meet the criteria for classification as hazardous for transport.

14.6 Special precautions for users

Does not meet the criteria for classification as hazardous for transport.

Additional Transport Information

Does not meet the criteria for classification as hazardous for transport.

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

TSCA (Toxic Substances Control Act): Not applicable. SARA 313: Not applicable. SARA 311/312: Not applicable. CERCLA Reportable Quantity: Not applicable. California Proposition 65:

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been made for this product.

16. OTHER INFORMATION

Further Information

Copyright © 2018 R&D Systems, Inc. a Bio-Techne Brand

This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislature. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists.

End of safety data sheet