

	IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING						
1.1	Product Identifiers						
1.2	Product Name: taxilin gamma Recombinant Protein Antigen						
	Catalog Number: NBP1-90605PEP Relevant identified uses of the substance or mixture and uses advised against						
1.2			seu against				
4.0	Identified Uses: For research use only.						
1.3		r of the safety data sheet	<b>T</b> . 1 1	4 000 500			
	Company:	Novus Biologicals a Bio-Techne Brand 10771 E Easter Ave	Telephone: Fax:	1-888-506- 1-303-730-1966			
		Centennial, CO 80112 USA	Internet:	www.novusbio.com			
			Email address:	novus@novusbio.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:	44 (0)1235 533420			
		Abingdon, OX14 3NB	Email address:	info.emea@bio-techne.com			
1.4	Emergency Telephon	e Number					
	Emergency Tel:	US: 303-730-1950 or 888-506-6887 / Euro	pe: +44(0)1235-529449				
2.	HAZARDS IDENTIFIC	ATION					
2.1	Classification of the s						
2.2	Classification according	g to the Regulation (EC) No 1272/2008 Not Class	ified				
2.2		Regulation (EC) No 1272/2008 Not Regulated					
• •							
2.3 Other Hazards This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioacc or higher.				and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.			
3.	COMPOSITION/INFORMATION ON INGREDIENTS						
	Substances						
	Substances						
3.1	Not applicable.						
3.1	Not applicable. <b>Mixtures</b>	contain hazardous chemicals at concentrations of	1% or greater. This product	is not known to contain carcinogens at concentrations of 0.1% or greater.			
3.1 3.2	Not applicable. <b>Mixtures</b>		1% or greater. This product	is not known to contain carcinogens at concentrations of 0.1% or greater.			
3.1 3.2 4.	Not applicable. <b>Mixtures</b> This product does not o	ES	1% or greater. This product	is not known to contain carcinogens at concentrations of 0.1% or greater.			
3.1 3.2 4.	Not applicable. Mixtures This product does not o FIRST AID MEASUR	ES	1% or greater. This product	is not known to contain carcinogens at concentrations of 0.1% or greater.			
3.1 3.2 4.	Not applicable. Mixtures This product does not of FIRST AID MEASUR Description of first aid General Advice	ES	1% or greater. This product	is not known to contain carcinogens at concentrations of 0.1% or greater.			
3.1 3.2 4.	Not applicable. Mixtures This product does not of FIRST AID MEASUR Description of first aid General Advice	ES d measures	1% or greater. This product	is not known to contain carcinogens at concentrations of 0.1% or greater.			
3.1 3.2 4.	Not applicable. Mixtures This product does not of FIRST AID MEASUR Description of first air General Advice Consult a doctor and sl If Inhaled	ES d measures					
3.1 3.2 4.	Not applicable. Mixtures This product does not of FIRST AID MEASUR Description of first air General Advice Consult a doctor and sl If Inhaled Remove to fresh air an In Case of Skin Conta	ES d measures now this safety data sheet. d monitor breathing. If breathing becomes difficult ct	t, give oxygen. If breathing s	tops, give artificial respiration. Consult a doctor.			
3.1 3.2 4.	Not applicable. Mixtures This product does not of FIRST AID MEASUR Description of first aid General Advice Consult a doctor and sl If Inhaled Remove to fresh air an In Case of Skin Conta Immediately wash skin In Case of Eye Contac	ES d measures now this safety data sheet. d monitor breathing. If breathing becomes difficult ct with copious amounts of soap and water for at le	t, give oxygen. If breathing s ast 15 minutes. Remove cor				
3.1 3.2 4.	Not applicable. Mixtures This product does not of FIRST AID MEASUR Description of first aid General Advice Consult a doctor and sl If Inhaled Remove to fresh air an In Case of Skin Conta Immediately wash skin In Case of Eye Contac Flush with copious area	ES d measures now this safety data sheet. d monitor breathing. If breathing becomes difficult ct with copious amounts of soap and water for at le	t, give oxygen. If breathing s ast 15 minutes. Remove cor	tops, give artificial respiration. Consult a doctor.			
3.1 3.2 4.	Not applicable. Mixtures This product does not of FIRST AID MEASUR Description of first aid General Advice Consult a doctor and sl If Inhaled Remove to fresh air an In Case of Skin Conta Immediately wash skin In Case of Eye Contac Flush with copious amounts If Swallowed	ES d measures how this safety data sheet. d monitor breathing. If breathing becomes difficult ict with copious amounts of soap and water for at le- ct points of water for at least 15 minutes. Consult a d	t, give oxygen. If breathing s ast 15 minutes. Remove cor loctor.	tops, give artificial respiration. Consult a doctor.			
3.1 3.2 4. 4.1	Not applicable. Mixtures This product does not of FIRST AID MEASUR Description of first aid General Advice Consult a doctor and sl If Inhaled Remove to fresh air an In Case of Skin Conta Immediately wash skin In Case of Eye Contac Flush with copious amo If Swallowed Rinse mouth with water	ES d measures now this safety data sheet. d monitor breathing. If breathing becomes difficult ict with copious amounts of soap and water for at le ct ounts of water for at least 15 minutes. Consult a d r. Do not induce vomiting unless directed to do so	t, give oxygen. If breathing s ast 15 minutes. Remove cor loctor.	tops, give artificial respiration. Consult a doctor.			
3.1 3.2 4. 4.1	Not applicable. Mixtures This product does not of FIRST AID MEASUR Description of first aid General Advice Consult a doctor and sl If Inhaled Remove to fresh air an In Case of Skin Conta Immediately wash skin In Case of Eye Contac Flush with copious amo If Swallowed Rinse mouth with water Most important symp	ES d measures now this safety data sheet. d monitor breathing. If breathing becomes difficult ict with copious amounts of soap and water for at le ct bunts of water for at least 15 minutes. Consult a d r. Do not induce vomiting unless directed to do so toms and effects, both acute and delayed	t, give oxygen. If breathing s ast 15 minutes. Remove cor loctor.	tops, give artificial respiration. Consult a doctor. Itaminated clothing and shoes and wash before reuse. Consult a doctor. er give anything by mouth to an unconscious person. Consult a doctor.			
3.1 3.2 4. 4.1	Not applicable. Mixtures This product does not of FIRST AID MEASUR Description of first aid General Advice Consult a doctor and sl If Inhaled Remove to fresh air an In Case of Skin Conta Immediately wash skin In Case of Eye Contac Flush with copious amo If Swallowed Rinse mouth with watel Most important symp To the best of our know	ES d measures now this safety data sheet. d monitor breathing. If breathing becomes difficult ict with copious amounts of soap and water for at le ct bunts of water for at least 15 minutes. Consult a d r. Do not induce vomiting unless directed to do so toms and effects, both acute and delayed vledge, the chemical, physical and toxicological pr	t, give oxygen. If breathing s ast 15 minutes. Remove cor octor. 9 by medical personnel. Neve roperties have not been thor	tops, give artificial respiration. Consult a doctor. Itaminated clothing and shoes and wash before reuse. Consult a doctor. er give anything by mouth to an unconscious person. Consult a doctor.			
4. 4.1	Not applicable. Mixtures This product does not of FIRST AID MEASUR Description of first aid General Advice Consult a doctor and sl If Inhaled Remove to fresh air an In Case of Skin Conta Immediately wash skin In Case of Eye Contac Flush with copious amo If Swallowed Rinse mouth with water Most important symp To the best of our know	ES d measures now this safety data sheet. d monitor breathing. If breathing becomes difficult ict with copious amounts of soap and water for at le ct bunts of water for at least 15 minutes. Consult a d r. Do not induce vomiting unless directed to do so toms and effects, both acute and delayed	t, give oxygen. If breathing s ast 15 minutes. Remove cor loctor. by medical personnel. Neve roperties have not been thor <b>eded</b>	tops, give artificial respiration. Consult a doctor. Itaminated clothing and shoes and wash before reuse. Consult a doctor.			

# 5. FIRE-FIGHTING MEASURES

# 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

Carbon oxides, Nitrogen oxides (NOx)

## 5.3 Precautions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary

#### 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 or gas.

#### 6.2 Environmental precautions

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**

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. The selected protective gloves must satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. **Body Protection** 

Wear appropriate protective clothing.

#### **Respiratory Protection**

For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

Appearance	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 Limits	No data available.	Oxidizing Properties	No data available.

9.2 Other safety information

## 10. STABILITY AND REACTIVITY

- 10.1 Reactivity
- No data available.
- 10.2 Chemical stability
- No data available.
- 10.3 Possibility of hazardous reactions
- No data available.

10.4 Conditions to avoid

No data available.

# 10.5 Incompatible materials

Strong oxidizing agents.

# 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx). In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

Acute Toxicity

Chamical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LD50 (inhalation, rat)
Urea	8.471 mg/kg (Rat)	>2000 mg/kg (Rat)	4h, > 0,83mg/l (Rat)
Disodium hydrogenorthophosphate	> 2000mg/kg (Rat)	>2000 mg/kg (Rat)	4h, > 0,83mg/l (Rat)
Sodium chloride	> 2000mg/kg (Rat)	>10000 mg/kg (Kanin)	1h, > 42 mg/l (Rat)

#### 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

Toxicity to fish flow-through test LC50 - Lepomis macrochirus (Bluegill) - 5.840 mg/l - 96 h (Sodium chloride) Remarks: (ECHA) No data available semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 203) semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h (Urea) (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates static test LC50 - Daphnia magna (Water flea) - 4.136 mg/l - 48 h (Sodium chloride) (OECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (DECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (DECD Test Guideline 202) static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (Disodium hydrogenorthophosphate) (DECD Test Guideline

Toxicity to algae static test EC50 - Nitzschia sp. - 2.430 mg/l - 120 h (Sodium chloride) (OECD Test Guideline 201) static test ErC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 201) static test ErC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 48 h (Urea) (OECD Test Guideline 201)

Toxicity to bacteria static test EC50 - activated sludge - > 1.000 mg/l - 3 h (Disodium hydrogenorthophosphate) (OECD Test Guideline 209) static test EC50 - activated sludge - > 1.000 mg/l - 3 h (Urea) (OECD Test Guideline 209)

12.2 Persistence and degradability

No data available.

- 12.3 Bioaccumulative potential
- No data available.
- 12.4 Mobility in soil

No data available.

#### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

No data available Discharge into the environment must be avoided. Discharge into the environment must be avoided. No data available Discharge into the environment must be avoided. Depending on the concentration, phosphates may contribute to the eutrophication of water supplies. Discharge into the environment must be avoided.

#### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### **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

Not regulated for Land Transport (ADR/RID), for Sea Transport (IMDG) or for Air Transport (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. 1907/2006

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 : Not applicable.

## 15.2 Chemical safety assessment

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

#### 16. OTHER INFORMATION

## Further Information

Copyright © 2020 Novus Biologicals 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