%" ˙   = 8 9 B H = : = 7 5 H = C B ˙ C : ˙ H < 9 ˙ G I 6 G H 5 B 7 9 # A = L H I F 9 ˙ 5 B 8 ˙ C : ˙ H < 9 ˙ 7 C A D 5 B M # I B 8 9 F H 5 ? = B ; ˙

%" %˙   D f c X i Wh ˙ = X Y b h] Z] Y f g ˙

   D f c X i Wh ˙ B U a Y . ˙ 5 F < ; 5 D % & ˙ F Y Wc a V] b U b h ˙ D f c h Y] b ˙ 5 b h] [Y b ˙

   7 U h U ˙ c [˙ B i a V Y f . ˙ B 6 D % ! - % * + , D 9 D ˙

%" &˙   F Y ` Y j U b h ˙] X Y b h] Z] Y X ˙ i g Y g ˙ c Z ˙ h \ Y ˙ g i V g h U b WY ˙ c f ˙ a] l h i f Y ˙ U b X ˙ i g Y g ˙ U X j] g Y X ˙ U [U] b g h ˙

Identified Uses: For research use only.

%" '˙   8 Y h U] ` g ˙ c Z ˙ h \ Y ˙ g i d d `] Y f ˙ c Z ˙ h \ Y ˙ g U Z Y h m ˙ X U h U ˙ g \ Y Y h ˙

Company:	Novus Biologicals a Bio-Techne Brand	Telephone:	1-888-506-
	10771 E Easter Ave	Fax:	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

%" (˙   9 a Y f [Y b Wm ˙ H Y ` Y d \ c b Y ˙ B i a V Y f ˙

Emergency Tel: US: 303-730-1950 or 888-506-6887 / Europe: +44(0)1235-529449

&" ˙   < 5 N 5 F 8 G ˙ = 8 9 B H = : = 7 5 H = C B ˙

&" %˙   7 ` U g g] Z] WU h] c b ˙ c Z ˙ h \ Y ˙ g i V g h U b WY ˙ c f ˙ a] l h i f Y ˙
Classification according to the Regulation (EC) No 1272/2008 Not Classified

&" &˙   @ U V Y ` ˙ 9 ` Y a Y b h g ˙

Labelling according to Regulation (EC) No 1272/2008 Not Regulated

&" '˙   C h \ Y f ˙ < U n U f X g ˙

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.

' " ˙   7 C A D C G = H = C B # = B : C F A 5 H = C B ˙ C B ˙ = B ; F 9 8 = 9 B H G ˙

' " %˙   G i V g h U b WY g ˙

Not applicable.

' " &˙   A] l h i f Y g ˙

This product does not contain hazardous chemicals at concentrations of 1% or greater. This product is not known to contain carcinogens at concentrations of 0.1% or greater.

(" ˙   : = F G H ˙ 5 = 8 ˙ A 9 5 G I F 9 G ˙

(" %˙   8 Y g Wf] d h] c b ˙ c Z ˙ Z] f g h ˙ U] X ˙ a Y U g i f Y g ˙

; Y b Y f U ` ˙ 5 X j] WY ˙
Consult a doctor and show this safety data sheet.

= Z ˙ = b \ U ` Y X ˙
Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

= b ˙ 7 U g Y ˙ c Z ˙ G _] b ˙ 7 c b h U Wh ˙
Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

= b ˙ 7 U g Y ˙ c Z ˙ 9 m Y ˙ 7 c b h U Wh ˙
Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

= Z ˙ G k U ` ` c k Y X ˙
Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

(" &˙   A c g h ˙] a d c f h U b h ˙ g m a d h c a g ˙ U b X ˙ Y Z Z Y Wh g ž ˙ V c h \ ˙ U Wi h Y ˙ U b X ˙ X Y ` U m Y X ˙

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

(" '˙   = b X] WU h] c b ˙ c Z ˙] a a Y X] U h Y ˙ a Y X] WU ` ˙ U h h Y b h ] c b ˙ U b X ˙ g d Y W] U ` ˙ h f Y U h a Y b h ˙ b Y Y X Y X ˙

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

) " ˙   : = F 9 ! : = ; < H = B ; ˙ A 9 5 G I F 9 G ˙

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

Carbon oxides, Nitrogen oxides (NOx)

Wear self-contained breathing apparatus for firefighting if necessary

6. ACCIDENTAL RELEASE MEASURES

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.

Do not let product enter drains.

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

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

7. HANDLING AND STORAGE

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.

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

Not applicable.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

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.

Use appropriate safety glasses.

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.

Wear appropriate protective clothing.

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

Appear	clear liquid	Vapor Pr	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	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)	No data available.	Explosive Properties	No data available.
Upper / Lower Flammability or Explosive Limits	No data available.	Oxidizing Properties	No data available.

Other safety information

No data available.

___

% S " ˙ G H 5 6 = @ = H M˙ 5 B 8 ˙ F 9 5 7 H= J = H M˙

% S " % ˙F Y U Wh] j] h m˙

No data available.

% S " & ˙7 \ Y a] WU ` ˙ g h U V ] `] h m˙

No data available.

% S " ' ˙D c g g] V] `] h m˙ c Z ˙ \ U n U f X c i g ˙ f Y U Wh] c b g ˙

No data available.

% S " (˙7 c b X] h] c b g ˙ h c ˙ U j c] X ˙

No data available.

% S ") ˙= b Wc a d U h] V ` Y ˙ a U h Y f ] U ` g ˙

Strong oxidizing agents.

% S " * ˙< U n U f X c i g ˙ X Y Wc a d c g] h] c b ˙ d f c X i Wh g ˙

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

___

% % " ˙ H C L = 7 C @ C ; = 7 5 @ ˙ = B : C F A 5 H= C B ˙

% % " % ˙= b Z c f a U h] c b ˙ c b ˙ h c l] Wc ` c [ ] WU ` ˙ Y Z Z Y Wh g ˙

5 Wi h Y ˙ H c l] W] h m ˙

G _] b ˙ 7 c f f c g] c b ˙ # ˙ = f f] h U h] c b ˙

Classified based on available data

G Y f] c i g ˙ 9 m Y ˙ 8 U a U [Y ˙ # ˙ = f f] h U h] c b ˙

Classified based on available data

F Y g d] f U h c f m ˙ c f ˙ G _] b ˙ G Y b g] h] n U h] c b ˙

Classified based on available data

; Y f a ˙ 7 Y ` ` ˙ A i h U [Y b] W] h m ˙

Classified based on available data

7 U f W] b c [Y b] W] h m ˙

Classified based on available data

F Y d f c X i Wh] j Y ˙ H c l] W] h m ˙

Classified based on available data

G d Y W] Z] W ˙H U f [Y h ˙ C f [U b ˙ H c l] W] h m ˙ ! ˙ G] b [` Y ˙ 9 l d c g i f Y ˙

Classified based on available data

G d Y W] Z] W ˙H U f [Y h ˙ C f [U b ˙ H c l] W] h m ˙ ! ˙ F Y d Y U h Y X ˙ 9 l d c g i f Y ˙

Classified based on available data

5 g d] f U h] c b ˙ < U n U f X ˙

Classified based on available data

G m a d h c a g ˙ # ˙ F c i h Y g ˙ c Z ˙ 9 l d c g i f Y ˙

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.

5 X X] h] c b U ` ˙ = b Z c f a U h] c b ˙

Classified based on available data

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% & " ˙ 9 7 C @ C ; = 7 5 @ ˙ = B : C F A 5 H= C B ˙

% & " % ˙H c l] W] h m ˙

%&" & DYfg]ghYbWY UbX XY[fUXUV]`]hm

No data available.

%&"' 6]cUWWiai`Uh]jYdchYbh]U`

No data available.

%&"(AcV]`]hm]b g c]``

No data available.

% & ")   F Y g i ` h g   c Z   D 6 H   U b X   j D j 6   U g g Y g g a Y b h

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.

% & " *   C h \ Y f   U X j Y f g Y   Y Z Z Y W h g

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.

% ' " ·   8 = G D C G 5 @ ·   7 C B G = 8 9 F 5 H = C B G

% ' " %   K U g h Y   h f Y U h a Y b h   a Y h \ c X g

D f c X i W h

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

7 c b h U a] b U h Y X   D U W _ U [ ] b [

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

% (" ·   H F 5 B G D C F H   = B : C F A 5 H = C B

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

% (" %   I B ! B i a V Y f

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

% (" &   I B   d f c d Y f   g \ ] d d] b [b U a Y

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

% (" '   H f U b g d c f h   \ U n U f X   W U g g fl Y g Ł

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

% (" (D U W _ U [ ] b [[f c i d

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

% (")   9 b j] f c b a Y b h U ` \ U n U f X g

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

% (" *   G d Y W] U ` d f Y W U i h] c b g   Z c f   i g Y f g

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

5 X X] h] c b U ` H f U b g d c f h   = b Z c f a U h] c b

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

%) " ·   F 9 ; I @ 5 H C F M   = B : C F A 5 H = C B

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

%) " %   G U Z Y h m ž   \ Y U ` h \   U b X   Y b j ] f c b a Y b h U ` f Y [i ` U h ] c b g # ` Y [ ] g ` U h] c b   g d Y W] Z] W   Z c f   h \ Y   g i V g h U b W Y   c f

H G 7 5   fl H c h] W   G i V g h U b W Y g   W c b h f c ` 5 W h Ł Not applicable.

G 5 F 5   ' Not applicable.

G 5 F 5   ' % % Not applicable.

7 9 F 7 @ 5   F Y d c f h U V ` Y Not applicable.

7 U `] Z c f b] U   D f c d c g] h] c b   *) Not applicable.

%) " &   7 \ Y a] W U ` g U Z Y h m   U g g Y g g a Y b h

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

% * " ·   C H < 9 F   = B : C F A 5 H = C B

: i f h \ Y f   = b Z c f a U h] c b

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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