

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifiers

Product Name: Mouse Oligodendrocyte Differentiation Kit
Catalog Number: SC004
Components: ITS Supplement (contains Selenious Acid and Holo Transferrin)
N2-MAX Supplement (contains Selenious Acid and Halo Transferrin)
Bovine Fibronectin Stock
Human FGF Basic
Human EGF
Human PDGF-AA

1.2 Relevant identified uses of the substance or mixture and uses advised 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 614 McKinley Place NE Minneapolis, MN 55413, USA	Telephone:	1-800-343-7475
		Fax:	1-612-656-4400
		Internet:	www.rndsystems.com
		Email address:	info@bio-techne.com
Canada:	21 Canmotor Toronto, Ontario M8Z4E6 Canada	Telephone:	1-855-668-8722
		Fax:	902-827-6402
		Email address:	Canada.inquiries@bio-techne.com
United Kingdom:	19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB	Telephone:	44 (0)1235 529449
		Fax:	44 (0)1235 533420
		Email address:	info.emea@bio-techne.com
China:	1193 Changning Road Unit 1901, Raffles Changning Office Shanghai , China	Telephone:	86-400-821-3475
		Fax:	76 (021)52371001
		Email address:	techsupport.cn@bio-techne.com

1.4 Emergency Telephone Number

Emergency Tel: For chemical emergency, spill, leak, fire, exposure, or accident call CHEMTREC day or night: Within U.S. 1-800-262-8200 Worldwide 1-703-741-5500
Bio-Techne Tel: US: 612-379-2956 or 800-343-7475 / Europe: +44(0)1235-529449 / China 86-400-821-3475

2. HAZARDS IDENTIFICATION

See additional safety data sheets.

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2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA]

Acute Toxicity Oral - Category 3
Acute Toxicity Inhalation – Category 3
STOT RE – Category 2
Aquatic Acute – Category 1
Aquatic Chronic – Category 1

2.2 Label Elements

Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]

Pictogram(s):



Signal Word: Danger

Statement(s):

H301 Highly flammable liquid and vapor.
H331 Toxic if inhaled
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s):

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Keep away from heat/sparks/open flames/hot surfaces. – No smoking
P270 Do not eat, drink, or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in position comfortable for breathing.

P311 Call a POISON CENTER or doctor/physician.
P314 Get medical advice/attention if you feel unwell.
P321 Specific treatment see section 4
P330 Rinse mouth
P391 Collect spillage.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other Hazards

Not available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Selenious Acid

3.2 Mixtures

Component	CAS No.	EC No.	Index No.	Classification	Conc.
Selenious Acid	7783-00-8		034-002-00-8		<0.001%

*Not hazardous at this concentration.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General Advice

Consult a doctor and show this safety data sheet.

If Inhaled

Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

In Case of Skin Contact

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.

In Case of Eye Contact

Flush with copious amounts of water for at least 15 minutes. Remove contact lenses if easy to do so. Consult a doctor.

If Swallowed

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.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation

May cause throat irritation or cough.

Skin

May cause skin irritation.

Eyes

May cause redness and pain.

Ingestion

May cause abdominal cramps, vomiting, and headache.

4.3 Indication of immediate medical attention and special treatment needed

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

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing media

Water spray, foam, carbon dioxide, dry sand, and special powder.

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions – Sodium oxides, selenium/selenium oxides.

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

Wear respiratory protection. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate all personnel to safe areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Cover spillage with suitable absorbent material. Do not flush with water. Keep in suitable closed containers for disposal.

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 contact with skin and eyes. Avoid formation of dust and aerosols. Avoid inhalation of vapor or mist. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities

Store locked up. Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage. Do not allow to come in contact with acids.

7.3 Specific end uses

Not applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

UK EH40 WEL: TWA 0.1 mg/m³

OSHA: TWA 0.2 mg/m³

8.2 Exposure controls

Appropriate Engineering Controls

Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling product. Ensure eye wash stations and safety showers are close to the workstation location.

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	Liquid	Vapor Pressure	No data available.
Odor	Odorless.	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.	Auto ignition 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

No data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

Strong acids

10.6 Hazardous decomposition products

Products formed under fire conditions: Sodium oxides, selenium/selenium oxides.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

LD50 Oral – Rat – 48 mg/kg/day.

LD50 Oral – Mouse – 16 mg/kg/day.

Skin Corrosion / Irritation

Redness, pain, blisters, and skin burns.

Serious Eye Damage / Irritation

Redness, pain, and severe burns.

Respiratory or Skin Sensitization

Upper respiratory irritation, burning sensation, sore throat, shortness of breath.

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

Corrosive to eyes, skin and respiratory tract. Inhalation may cause lung edema.

Specific Target Organ Toxicity - Repeated Exposure

Skin sensitization and liver impairment.

Aspiration Hazard

Classified based on available data.

Symptoms / Routes of Exposure

Inhalation: May cause respiratory tract irritation.

Ingestion: May be fatal if swallowed.

Skin: May be absorbed through injured skin. Causes redness.

Eyes: Causes redness and pain.

Delayed/Immediate Effects:

Hyper salivation, garlic odor of the breath, vomiting, diarrhea, muscle spasms, increased blood pressure, pulmonary edema, eye irritation.

Additional Information

Classified based on available data.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Salvelinu fontinalis (Brook Trout) LC50 36.3 mg/L/24 hours.

12.2 Persistence and degradability

No data available.

12.3 Bio accumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

Toxic to aquatic organisms.

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): Selenious acid is listed.

SARA 313: Selenious acid is listed.

SARA 311/312: Acute health hazard

CERCLA Reportable Quantity: 10 lbs.

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 © 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.

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifiers

Product Name: ITS Supplement
Catalog Number: SC004

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Uses: For research use only.

1.3 Details of the supplier of the safety data sheet

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2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA]
Not applicable.

2.2 Label Elements

Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]
Not applicable.

2.3 Other Hazards

Potential risk of infection. Product has been donor screened for some infectious agents, however as human sourced material testing cannot be guaranteed to detect all infectious agents. Treat as potentially infectious.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Human Holo Transferrin

3.2 Mixtures

Component	CAS No.	EC No.	Index No.	Classification	Conc.
Human Holo Transferrin					<0.1%

4. FIRST AID MEASURES

4.1 Description of first aid measures

General Advice

Consult a doctor and show this safety data sheet.

If Inhaled

Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

In Case of Skin Contact

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.

In Case of Eye Contact

Flush with copious amounts of water for at least 15 minutes. Remove contact lenses if easy to do so. Consult a doctor.

If Swallowed

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.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation

May cause throat irritation or cough.

Skin

May cause skin irritation.

Eyes

May cause redness and pain.

Ingestion

May cause abdominal cramps, vomiting, and headache.

4.3 Indication of immediate medical attention and special treatment needed

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

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing media

Any means suitable for extinguishing the surrounding area.

5.2 Special hazards arising from the substance or mixture

Dangerous decomposition is not anticipated.

5.3 Precautions for fire-fighters

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

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate all personnel to safe areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Cover spillage with suitable absorbent material. Do not flush with water. Keep in suitable closed containers for disposal.

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

Treat as a potential biohazard. Store away from all foodstuffs. For laboratory use only.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end uses

Not applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Not available.

8.2 Exposure controls

Appropriate Engineering Controls

Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling product. Ensure eye wash stations and safety showers are close to the workstation location.

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	Liquid	Vapor Pressure	No data available.
Odor	Odorless.	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.	Auto ignition 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

No data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

No data available.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

Classified based on available data.

Skin Corrosion / Irritation

May be harmful if absorbed through the skin. May cause skin irritation.

Serious Eye Damage / Irritation

May cause eye irritation.

Respiratory or Skin Sensitization

No sensitizing effects known.

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: May cause respiratory tract irritation.
Ingestion: May be fatal if swallowed.
Skin: May be absorbed through injured skin. Causes redness.
Eyes: Causes redness and pain.

Delayed/Immediate Effects:

Classified based on available data.

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 Bio accumulative potential

No data available.

12.4 Mobility in soil

No data available.

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 in the same manner as unused product.

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

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Additional Transport Information

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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

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Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA]

Acute Toxicity Oral - Category 3
Acute Toxicity Inhalation – Category 3
STOT RE – Category 2
Aquatic Acute – Category 1
Aquatic Chronic – Category 1

2.2 Label Elements

Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]

Pictogram(s):



Signal Word: Danger

Statement(s):

H301 Highly flammable liquid and vapor.
H331 Toxic if inhaled
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s):

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Keep away from heat/sparks/open flames/hot surfaces. – No smoking
P270 Do not eat, drink, or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in position comfortable for breathing.

P311 Call a POISON CENTER or doctor/physician.
P314 Get medical advice/attention if you feel unwell.
P321 Specific treatment see section 4
P330 Rinse mouth
P391 Collect spillage.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other Hazards

Not available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Selenious Acid

3.2 Mixtures

Component	CAS No.	EC No.	Index No.	Classification	Conc.
Selenious Acid	7783-00-8		034-002-00-8		<0.001%

*Not hazardous at this concentration.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General Advice

Consult a doctor and show this safety data sheet.

If Inhaled

Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

In Case of Skin Contact

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.

In Case of Eye Contact

Flush with copious amounts of water for at least 15 minutes. Remove contact lenses if easy to do so. Consult a doctor.

If Swallowed

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.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation

May cause throat irritation or cough.

Skin

May cause skin irritation.

Eyes

May cause redness and pain.

Ingestion

May cause abdominal cramps, vomiting, and headache.

4.3 Indication of immediate medical attention and special treatment needed

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

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing media

Water spray, foam, carbon dioxide, dry sand, and special powder.

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions – Sodium oxides, selenium/selenium oxides.

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

Wear respiratory protection. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate all personnel to safe areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Cover spillage with suitable absorbent material. Do not flush with water. Keep in suitable closed containers for disposal.

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 contact with skin and eyes. Avoid formation of dust and aerosols. Avoid inhalation of vapor or mist. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities

Store locked up. Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage. Do not allow to come in contact with acids.

7.3 Specific end uses

Not applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

UK EH40 WEL: TWA 0.1 mg/m³

OSHA: TWA 0.2 mg/m³

8.2 Exposure controls

Appropriate Engineering Controls

Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling product. Ensure eye wash stations and safety showers are close to the workstation location.

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	Liquid	Vapor Pressure	No data available.
Odor	Odorless.	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.	Auto ignition 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

No data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

Strong acids

10.6 Hazardous decomposition products

Products formed under fire conditions: Sodium oxides, selenium/selenium oxides.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

LD50 Oral – Rat – 48 mg/kg/day.

LD50 Oral – Mouse – 16 mg/kg/day.

Skin Corrosion / Irritation

Redness, pain, blisters, and skin burns.

Serious Eye Damage / Irritation

Redness, pain, and severe burns.

Respiratory or Skin Sensitization

Upper respiratory irritation, burning sensation, sore throat, shortness of breath.

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

Corrosive to eyes, skin and respiratory tract. Inhalation may cause lung edema.

Specific Target Organ Toxicity - Repeated Exposure

Skin sensitization and liver impairment.

Aspiration Hazard

Classified based on available data.

Symptoms / Routes of Exposure

Inhalation: May cause respiratory tract irritation.

Ingestion: May be fatal if swallowed.

Skin: May be absorbed through injured skin. Causes redness.

Eyes: Causes redness and pain.

Delayed/Immediate Effects:

Hyper salivation, garlic odor of the breath, vomiting, diarrhea, muscle spasms, increased blood pressure, pulmonary edema, eye irritation.

Additional Information

Classified based on available data.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Salvelinu fontinalis (Brook Trout) LC50 36.3 mg/L/24 hours.

12.2 Persistence and degradability

No data available.

12.3 Bio accumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

Toxic to aquatic organisms.

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): Selenious acid is listed.

SARA 313: Selenious acid is listed.

SARA 311/312: Acute health hazard

CERCLA Reportable Quantity: 10 lbs.

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 © 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.

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifiers

Product Name: N-2 Max Supplement
Catalog Number: SC004

1.2 Relevant identified uses of the substance or mixture and uses advised 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 614 McKinley Place NE Minneapolis, MN 55413, USA	Telephone:	1-800-343-7475
		Fax:	1-612-656-4400
		Internet:	www.rndsystems.com
		Email address:	info@bio-techne.com
Canada:	21 Canmotor Avenue Toronto, Ontario M8Z4E6 Canada	Telephone:	1-855-668-8722
		Fax:	902-827-6402
		Email address:	Canada.inquiries@bio-techne.com
United Kingdom:	19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB	Telephone:	44 (0)1235 529449
		Fax:	44 (0)1235 533420
		Email address:	info.emea@bio-techne.com
China:	1193 Changning Road Unit 1901, Raffles Changning Office Shanghai, China	Telephone:	86-400-821-3475
		Fax:	76 (021)52371001
		Email address:	techsupport.cn@bio-techne.com

1.4 Emergency Telephone Number

Emergency Tel: For chemical emergency, spill, leak, fire, exposure, or accident call CHEMTREC day or night: Within U.S. 1-800-262-8200 Worldwide 1-703-741-5500
Bio-Techne Tel: US: 612-379-2956 or 800-343-7475 / Europe: +44(0)1235-529449 / China 86-400-821-3475

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA]

Not applicable.

2.2 Label Elements

Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]

Not applicable.

2.3 Other Hazards

Potential risk of infection. Product has been donor screened for some infectious agents, however as human sourced material testing cannot be guaranteed to detect all infectious agents. Treat as potentially infectious.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Human Holo Transferrin

3.2 Mixtures

Component	CAS No.	EC No.	Index No.	Classification	Conc.
Human Holo Transferrin					<0.1%

4. FIRST AID MEASURES

4.1 Description of first aid measures

General Advice

Consult a doctor and show this safety data sheet.

If Inhaled

Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

In Case of Skin Contact

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.

In Case of Eye Contact

Flush with copious amounts of water for at least 15 minutes. Remove contact lenses if easy to do so. Consult a doctor.

If Swallowed

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.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation

May cause throat irritation or cough.

Skin

May cause skin irritation.

Eyes

May cause redness and pain.

Ingestion

May cause abdominal cramps, vomiting, and headache.

4.3 Indication of immediate medical attention and special treatment needed

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

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing media

Any means suitable for extinguishing the surrounding area.

5.2 Special hazards arising from the substance or mixture

Dangerous decomposition is not anticipated.

5.3 Precautions for fire-fighters

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

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate all personnel to safe areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Cover spillage with suitable absorbent material. Do not flush with water. Keep in suitable closed containers for disposal.

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

Treat as a potential biohazard. Store away from all foodstuffs. For laboratory use only.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end uses

Not applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Not available.

8.2 Exposure controls

Appropriate Engineering Controls

Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling product. Ensure eye wash stations and safety showers are close to the workstation location.

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	Liquid	Vapor Pressure	No data available.
Odor	Odorless.	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.	Auto ignition 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

No data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

No data available.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

Classified based on available data.

Skin Corrosion / Irritation

May be harmful if absorbed through the skin. May cause skin irritation.

Serious Eye Damage / Irritation

May cause eye irritation.

Respiratory or Skin Sensitization

No sensitizing effects known.

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: May cause respiratory tract irritation.
Ingestion: May be fatal if swallowed.
Skin: May be absorbed through injured skin. Causes redness.
Eyes: Causes redness and pain.

Delayed/Immediate Effects:

Classified based on available data.

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 Bio accumulative potential

No data available.

12.4 Mobility in soil

No data available.

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 in the same manner as unused product.

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

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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

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End of safety data sheet.