

Version 3.1 SDS Revision Date 11/9/2023 **www.rndsystems.com** 

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

1.1 Product Identifiers

1.3

Product Name: Human Chemerin Quantikine ELISA

Catalog Number: DCHM00

Components: Assay Diluent (contains Proclin 300 Mixture = .005%)

Calibrator Diluent (contains Proclin 300 Mixture = .005%)

Color Reagent A

Color Reagent B (contains N,N-Dimethylformamide and Tetramethylbenzidine)

Conjugate (contains Proclin 300 Mixture = .005%) Standard (contains Proclin 300 Mixture = .005%)

Stop Solution (contains Sulfuric Acid)

Wash Buffer Concentrate (contains Proclin 300 Mixture = .025%)

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

Identified Uses: For Research Use Only

Details of the supplier of the safety data sheet

Company: R&D Systems, Inc. a Bio-Techne Brand Telephone:

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:

Oakville, ON L6M 2V5 Email address: Canada.inquiries@bio-techne.com

1-800-343-7475

902-827-6402

 United Kingdom:
 19 Barton Lane
 Telephone:
 44 (0)1235 529449

 Abingdon Science Park
 Fax:
 44 (0)1235 533420

Abingdon Science Park Fax: 44 (0)1235 533420
Abingdon, OX14 3NB Email address: info.emea@bio-techne.com

1.4 Emergency Telephone Number

Emergency Tel: US: 612-379-2956 or 800-343-7475 / Europe: +44(0)1235-529449

## 2. HAZARDS IDENTIFICATION

See additional safety data sheets.



Version SDS Revision Date 5/23/2019 **www.rndsystems.com** 

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

1.1 Product Identifiers

1.2

Product Name: Assay Diluent (contains Proclin 300 Mixture = .005%)

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 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

Email address.

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 Telephone Number

For chemical emergency, spill, leak, fire, exposure, or accident call CHEMTREC day or night:

Within USA and Canada: 1-800-424-9300. Outside USA and Canada: +1 703-527-3887 (collect calls accepted).

## 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]

Sensitization, skin - Category 1

2.2 Label Elements

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

Pictogram(s):

**!** 

Signal Word: Warning

Hazard Statement(s):

H317 May cause an allergic skin reaction.

Precautionary Statement(s):

P261 Avoid breathing dust/fumes/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P333+313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

2.3 Other Hazards - None

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

# 3.1 Substances

Not applicable.

# 3.2 Mixtures

Component	CAS No.	EC No.	Index No.	Classification	Conc.
Proclin 300 Mixture = .005% (activingredients)	ve 96118-96-6			H317	
Mixture of 5-Chloro-2-Methyl-4- Isothiazolin-3-One (26172-55-4 and 2-Methyl-4-Isothiazolin-3- One (2682-20-4)			613-167-00-5		= 0.005 %

## 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. 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

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

## 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

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 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

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

Upper / Lower Flammability or Explosive

Appearance Lyophilized white powder or clear liquid Odor Little to none **Odor Threshold** No data available. рН No data available. Melting / Freezing Point No data available. Boiling Point / Range No data available. Flash Point No data available. **Evaporation Rate** No data available. Flammability (Solid, Gas) No data available.

No data available.

Vapor Pressure No data available. **Vapor Density** No data available. **Relative Density** No data available. Solubility(ies) No data available. **Partition Coefficient** No data available. **Autoignition Temperature** No data available. **Decomposition Temperature** No data available. Viscosity No data available. **Explosive Properties** No data available.

No data available.

**Oxidizing Properties** 

Limits

Limits

# Other safety information

No data available.

# 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

9.2

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.

#### 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:
Proclin 300 Mixture = .005%

Not applicable.

# 15.2 Chemical safety assessment

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

# 16. OTHER INFORMATION

#### **Further Information**

Copyright © 2019 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



Version SDS Revision Date 5/23/2019 www.rndsystems.com

# IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifiers

1.2

Calibrator Diluent (contains Proclin 300 Mixture = .005%) Product Name: Relevant identified uses of the substance or mixture and uses advised against

Identified Uses: For Research Use Only

Details of the supplier of the safety data sheet 1.3

> Company: R&D Systems, Inc. a Bio-Techne Brand Telephone: 1-800-343-7475 614 McKinley Place NE 1-612-656-4400 Fax: Minneapolis, MN 55413, USA Internet: www.rndsystems.com

> > Email address: info@bio-techne.com

> > > 1-855-668-8722

Canada: 461 North Service Rd West

Unit B37

Fax: 902-827-6402

Oakville, ON L6M 2V5 Email address: Canada.inquiries@bio-techne.com

Telephone:

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 Telephone Number** 

For chemical emergency, spill, leak, fire, exposure, or accident call CHEMTREC day or night:

Within USA and Canada: 1-800-424-9300. Outside USA and Canada: +1 703-527-3887 (collect calls accepted).

#### HAZARDS IDENTIFICATION 2.

#### 2.1 Classification of the substance or mixture

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

Sensitization, skin - Category 1

2.2 **Label Elements** 

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

Pictogram(s):

Signal Word: Warning

Hazard Statement(s):

H317 May cause an allergic skin reaction.

Precautionary Statement(s):

P261 Avoid breathing dust/fumes/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P333+313 If skin irritation or rash occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.

2.3 Other Hazards - None

#### **COMPOSITION/INFORMATION ON INGREDIENTS** 3.

#### 3.1 Substances

Not applicable.

#### 3.2 Mixtures

Component	CAS No.	EC No.	Index No.	Classification	Conc.
Proclin 300 Mixture = .005% (activing redients)	ve 96118-96-6			H317	
Mixture of 5-Chloro-2-Methyl-4- Isothiazolin-3-One (26172-55-4 and 2-Methyl-4-Isothiazolin-3- One (2682-20-4)			613-167-00-5		= 0.005 %

#### 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. 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

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

## 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

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 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

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

Upper / Lower Flammability or Explosive

Appearance Lyophilized white powder or clear liquid Odor Little to none **Odor Threshold** No data available. рН No data available. Melting / Freezing Point No data available. Boiling Point / Range No data available. Flash Point No data available. **Evaporation Rate** No data available. Flammability (Solid, Gas) No data available.

No data available.

Vapor Pressure No data available. **Vapor Density** No data available. **Relative Density** No data available. Solubility(ies) No data available. **Partition Coefficient** No data available. **Autoignition Temperature** No data available. **Decomposition Temperature** No data available. Viscosity No data available. **Explosive Properties** No data available.

No data available.

**Oxidizing Properties** 

9.2 Other safety information

Limits

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.

## 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:
Proclin 300 Mixture = .005%

Not applicable.

# 15.2 Chemical safety assessment

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

# 16. OTHER INFORMATION

#### **Further Information**

Copyright © 2019 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



Version 2.0 SDS Revision Date 10/25/2023 www.rndsystems.com

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

1.1 **Product Identifiers** 

> Product Name: Color Reagent B (contains N,N-Dimethylformamide and Tetramethylbenzidine)

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

Identified Uses:

Details of the supplier of the safety data sheet 1.3

> Company: R&D Systems, Inc. a Bio-Techne Brand Telephone: 1-800-343-7475

614 McKinley Place NE 1-612-656-4400

Minneapolis, MN 55413, USA Internet: www.rndsystems.com

Email address: info@bio-techne.com

461 North Service Rd West 1-855-668-8722 Canada: Telephone: 902-827-6402

Unit B37

Oakville, ON L6M 2V5 Email address: Canada.inquiries@bio-techne.com

19 Barton Lane 44 (0)1235 529449 United Kingdom: Telephone:

> Abingdon Science Park 44 (0)1235 533420 Fax: Abingdon, OX14 3NB Email address: info.emea@bio-techne.com

1.4 **Emergency Telephone Number** 

For chemical emergency, spill, leak, fire, exposure, or accident call CHEMTREC day or night:

Within USA and Canada: 1-800-424-9300. Outside USA and Canada: +1 703-527-3887 (collect calls accepted).

#### 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, dermal - Category 4 Skin Corrosion/Irritation - Category 2

Serious eye damage/eye irritation - Category 2A

Acute Toxicity, inhalation - Category 4 Reproductive Toxicity - Category 1B

#### 2.2 **Label Elements**

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

Pictogram(s):





Signal Word: Danger

Hazard Statement(s):

H312 Harmful in contact with skin H315 Causes skin irritation H319 Causes serious eye irritation.

H332 Harmful if inhaled.

May damage fertility or the unborn child

Precautionary Statement(s):

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust/fumes/gas/mist/vapours/spray. P264 Wash hands thoroughly after handling.

P271 Use only in well-ventilated areas.

P280 Wear protective gloves/protective clothing/eye protection/face protection. P302+352 IF ON SKIN: Wash with plenty of soap and water.

P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+313 IF exposed or concerned: Get medical advice/ attention.

P312 Call poison center/doctor if you feel unwell. P321 Specific treatment (see Section 4).

P332+313 If skin irritation occurs: Get medical advice/attention. P337+313 If eye irritation persists: Get medical advice/attention. P362+364 Take off contaminated clothing and wash it before reuse.

2.3 Other Hazards - None

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Not applicable.

#### 3.2 Mixtures

Component	CAS No.	EC No.	Index No.	Classification	Conc.
N,N-Dimethylformamide	68-12-2	200-679-5		H312 , H315 , H319 , H332 , H360	< 25 %
Tetramethylbenzidine	54827-17-7	259-364-6	616-001-00-x	Not hazardous at this concentration.	< 0.05 %

#### 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. 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

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

#### 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

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 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

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

Tetramethylbenzidine - 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

## Occupational exposure limit values (Workplace Exposure Limits

List source(s): EU - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC UK - EH40/2005 Work Exposure Limits, Third edition. Published 2018. IRE - 2018 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

Component	CAS No.	Agency	OELs	STEL
N, N – Dimethylformamide	68-12-2	OSHA (USA)	10 ppm 30 mg/m3	20 ppm 61 mg/m3
		European Union (IOELV)	5 ppm 15 mg/m3	10 ppm 30 mg/m3
		United Kingdom (UK)	5 ppm 15 mg/m3	10 ppm 30 mg/m3
		Ireland	5 ppm 15 mg/m3	10 ppm 30 mg/m3

#### Human Health Values

Component	Endpoint	Threshold Level	Protection goal / route of exposure	Use in	Exposure time
N, N – Dimethylformamide CAS No. 68-12-2	DNEL	6 mg/m3	Human, inhalation	Worker (industry)	Chronic – system effects
		1,1 mg/kg bw/day	Human, dermal	Worker (industry)	Chronic – systemic effects

## **Environmental Values**

Component	Endpoint	Threshold Level	Organism	Environmental compartment	Exposure time
N, N – Dimethylformamide CAS No. 68-12-2	PNEC	44 mg/l	Aquatic organisms	Sewage treatment plant (STP)	Short-term (single instance)
		111 mg/kg	Aquatic organisms	Freshwater sediment	Short-term (single instance)
		11,1 mg/kg	Aquatic organisms	Marine sediment	Short-term (single instance)

Tetramethylbenzidine 54827-17-7 Contains no substances with occupational exposure limit values.

# Exposure controls

8.2

# Appropriate Engineering Controls

Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure the facility is equipped with a safety shower and eye wash stations near point of use.

# **Personal Protective Equipment**

# Eye / Face Protection

Use safety goggles with side protection and face shield

### 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

Use appropriate respiratory protection if adequate exhaust ventilation is absent.

## Environmental exposure controls

Prevent product from entering the drains. Dispose in accordance with federal, state and/or local regulations.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

Appearance	Liquid	Vapor Pressure	No data available.
Odor	No data available.	Vapor Density	No data available.
Odor Threshold	No data available.	Relative Density	No data available.
рН	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) **Explosive Properties** No data available. No data available.

Upper / Lower Flammability or Explosive

No data available. **Oxidizing Properties** No data available.

#### 9.2 Other safety information

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

N,N-Dimethylformamide - Heat, moisture. Tetramethylbenzidine - Heat, flames, sparks.

#### 10.5 Incompatible materials

N,N-Dimethylformamide - Strong acids/alkalis, strong oxidizing/reducing agents. Tetramethylbenzidine - Strong oxidizing agents.

#### 10.6 Hazardous decomposition products

Strong acids/alkalis, strong oxidizing/reducing agents.

#### 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

#### **Acute Toxicity**

N,N-Dimethylformamide - LD50 - Oral, Rat - 2,800 mg/kg Tetramethylbenzidine - No data available.

N,N-Dimethylformamide - Classified based on available data

Tetramethylbenzidine - No data available.

## Serious Eye Damage / Irritation

N.N-Dimethylformamide - Classified based on available data

Tetramethylbenzidine - No data available.

# Respiratory or Skin Sensitization

N,N-Dimethylformamide - Classified based on available data

Tetramethylbenzidine - No data available.

## **Germ Cell Mutagenicity**

N,N-Dimethylformamide - Genotoxicity in vitro - mouse - lymphocyte, Mutation in mammalian somatic cells.

Tetramethylbenzidine - Classified based on available data

### Carcinogenicity

N,N-Dimethylformamide - Classified based on available data

Tetramethylbenzidine - Not classified to its carcinogenicity based on its IARC, ACGIH, NTP or EPA classification at levels less than 0.1%.

### Reproductive Toxicity

N,N-Dimethylformamide - May cause congenital malformation in the fetus. Presumed human reproductive toxicant.

Tetramethylbenzidine - Classified based on available data

# Specific Target Organ Toxicity - Single Exposure

Classified based on available data

# Specific Target Organ Toxicity - Repeated Exposure

N,N-Dimethylformamide - Classified based on available data

Tetramethylbenzidine - No data available.

# **Aspiration Hazard**

N,N-Dimethylformamide - Classified based on available data

Tetramethylbenzidine - No data available.

# Symptoms / Routes of Exposure

N,N-Dimethylformamide - Toxic if inhaled. May cause respiratory tract irritation. Inhalation:

Tetramethylbenzidine - There may be irritation of the throat with a feeling of tightness in the chest.

N,N-Dimethylformamide - May be harmful if swallowed. Ingestion:

Tetramethylbenzidine - There may be irritation of the throat.

N,N-Dimethylformamide - May be harmful if absorbed through the skin. May cause skin irritation. Skin<sup>-</sup>

Tetramethylbenzidine - There may be mild irritation at the site of contact.

Eyes: N,N-Dimethylformamide - Causes serious eye irritation.

Tetramethylbenzidine - There may be irritation and redness.

Delayed / Immediate Effects: N,N-Dimethylformamide - No known symptoms. Tetramethylbenzidine - No data available.

#### **Additional Information**

N,N-Dimethylformamide - Classified based on available data

Tetramethylbenzidine - No data available.

#### 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.

#### 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

Dispose of contents/container in accordance with local/regional/national/international regulations.

# **Contaminated Packaging**

Dispose of contents/container in accordance with local/regional/national/international regulations.

# 14. TRANSPORT INFORMATION

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

### 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 data sheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No. 1907/2006.

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

TSCA (Toxic Substances Control Act):

 $N, N\text{-}Dimethyl formamide-- Is\ Listed.$ 

Tetramethylbenzidine - Is Listed.

SARA 313: Not applicable.

SARA 311/312: Not applicable.

CERCLA Reportable Quantity: Not applicable.

California Proposition 65:

N,N-Dimethylformamide



WARNING: This product can expose you to chemicals including N,N-Dimethylformamide, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

#### **National Inventories**

#### **Country Specific Chemical Inventory Status**

	Australia (AIIC)	China (IECSC)	EU (ESCI)	EU REACH	Japan (CSCL-ENCS)	Korea (KECI)	New Zealand (NXIoC)	Philippines (PICCS)
N,N-Dimethylformamide	X	X	X	X	X	X	Х	Х

Legend: AIIC Australian Inventory of Industrial Chemicals; CICR Chemical Inventory and Control Regulation; CSCL-ENCS List of Existing and New Chemical Substances (CSCL-ENCS) DSL Domestic Substances List (DSL); ECSI EC Substance Inventory (EINECS, ELINCS, NLP); IECSC Inventory of Existing Chemical Substances Produced or Imported in China; KECI Korea Existing Chemicals Inventory; NZIoC New Zealand Inventory of Chemicals: PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS); REACH Reg. REACH registered substances; TCSI Taiwan Chemical Substance Inventory; TSCA Toxic Substance Control Act

#### Authorization / Restriction according to EU REACH

Component	Anr	ACH (1907/2006) - INEX XIV - Substances bject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
N,N-Dimethylformamide			Use is restricted under specified conditions. See link for additional details. EU REACH Restriction - N,N-Dimethylformamide	SVHC Candidate list - (Toxic to Reproduction, Article 57c)

## **National Regulations**

Component	Germany – Water Classification (VwVwS)	Germany – TA – Luft Class
N,N-Dimethylformamide	WGK 2	-

## 15.2 Chemical safety assessment

An occupational exposure assessment for inhalation and dermal exposure was conducted, based on site specific conditions, and the results were found to be below the occupational exposure limits and derived no-effect limits (DNELs) for this product. Operational conditional and risk management measures described in this safety data sheet are determined adequate. Customers may conduct their own assessments to evaluate exposure within their operations and take appropriate risk management.

# 16. OTHER INFORMATION

# **Further Information**

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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



Version SDS Revision Date 5/23/2019 **www.rndsystems.com** 

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

1.1 Product Identifiers

1.2

1.4

Product Name: Conjugate (contains Proclin 300 Mixture = .005%)

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 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: 44 (0)1235 533420
Abingdon, OX14 3NB Email address: info.emea@bio-techne.com

Abiliguoli, OX 14

For chemical emergency, spill, leak, fire, exposure, or accident call CHEMTREC day or night:

Within USA and Canada: 1-800-424-9300. Outside USA and Canada: +1 703-527-3887 (collect calls accepted).

#### 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]

Sensitization, skin - Category 1

**Emergency Telephone Number** 

### 2.2 Label Elements

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

Pictogram(s):

Signal Word: Warning

Hazard Statement(s):

H317 May cause an allergic skin reaction.

Precautionary Statement(s):

P261 Avoid breathing dust/fumes/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P333+313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

2.3 Other Hazards - None

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

# 3.1 Substances

Not applicable.

# 3.2 Mixtures

Component	CAS No.	EC No.	Index No.	Classification	Conc.
Proclin 300 Mixture = .005% (activing redients)	ve 96118-96-6			H317	
Mixture of 5-Chloro-2-Methyl-4- Isothiazolin-3-One (26172-55-4 and 2-Methyl-4-Isothiazolin-3- One (2682-20-4)			613-167-00-5		= 0.005 %

#### 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. 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

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

## 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

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 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

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 Odor Little to none Vapor Density **Odor Threshold** No data available. **Relative Density** Solubility(ies) рΗ No data available. **Partition Coefficient** Melting / Freezing Point No data available. Boiling Point / Range **Autoignition Temperature** No data available. Flash Point No data available. **Decomposition Temperature Evaporation Rate** No data available. Viscosity **Explosive Properties** Flammability (Solid, Gas) No data available.

No data available.

Upper / Lower Flammability or Explosive

Limits

Liiiito

# 9.2 Other safety information

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.

**Oxidizing Properties** 

## 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.

No data available.

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.

## 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:
Proclin 300 Mixture = .005%

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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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



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# IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifiers

1.2

Standard (contains Proclin 300 Mixture = .005%) Product Name: Relevant identified uses of the substance or mixture and uses advised against

Identified Uses: For Research Use Only

Details of the supplier of the safety data sheet 1.3

> Company: R&D Systems, Inc. a Bio-Techne Brand Telephone: 1-800-343-7475 614 McKinley Place NE 1-612-656-4400 Fax: Minneapolis, MN 55413, USA Internet: www.rndsystems.com

> > Email address: info@bio-techne.com

> > > 1-855-668-8722

461 North Service Rd West Canada:

Unit B37

Fax: 902-827-6402

Oakville, ON L6M 2V5 Email address: Canada.inquiries@bio-techne.com

Telephone:

United Kingdom: 19 Barton Lane Telephone: 44 (0)1235 529449

> Abingdon Science Park Fax: 44 (0)1235 533420 Email address: info.emea@bio-techne.com

Abingdon, OX14 3NB

1.4 **Emergency Telephone Number** 

For chemical emergency, spill, leak, fire, exposure, or accident call CHEMTREC day or night:

Within USA and Canada: 1-800-424-9300. Outside USA and Canada: +1 703-527-3887 (collect calls accepted).

#### HAZARDS IDENTIFICATION 2.

#### 2.1 Classification of the substance or mixture

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

Sensitization, skin - Category 1

#### 2.2 **Label Elements**

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

Pictogram(s):



Signal Word: Warning

Hazard Statement(s):

H317 May cause an allergic skin reaction.

Precautionary Statement(s):

P261 Avoid breathing dust/fumes/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P333+313 If skin irritation or rash occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.

#### 2.3 Other Hazards - None

#### **COMPOSITION/INFORMATION ON INGREDIENTS** 3.

#### 3.1 Substances

Not applicable.

#### 3.2 Mixtures

Component	CAS No.	EC No.	Index No.	Classification	Conc.
Proclin 300 Mixture = .005% (activing redients)	ve 96118-96-6			H317	
Mixture of 5-Chloro-2-Methyl-4- Isothiazolin-3-One (26172-55-4 and 2-Methyl-4-Isothiazolin-3- One (2682-20-4)			613-167-00-5		= 0.005 %

#### 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. 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

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

## 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

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 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

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.

#### PHYSICAL AND CHEMICAL PROPERTIES 9.

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

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

No data available.

Upper / Lower Flammability or Explosive

Limits

Other safety information No data available.

STABILITY AND REACTIVITY

#### 10.1 Reactivity

9.2

10.

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.

**Oxidizing Properties** 

#### Conditions to avoid 10.4

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

There may be irritation of the throat with a feeling of tightness in the chest. Inhalation:

No data available.

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.

#### 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:
Proclin 300 Mixture = .005%

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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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



Version SDS Revision Date 5/23/2019 **www.rndsystems.com** 

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

1.1 Product Identifiers

Product Name: Stop Solution (contains Sulfuric Acid)

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 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: 44 (0)1235 533420
Abingdon, OX14 3NB Email address: info.emea@bio-techne.com

1.4 Emergency Telephone Number

For chemical emergency, spill, leak, fire, exposure, or accident call CHEMTREC day or night:

Within USA and Canada: 1-800-424-9300. Outside USA and Canada: +1 703-527-3887 (collect calls accepted).

#### 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]

Skin Corrosion/Irritation - Category 2 Eye Irritation - Category 2A

2.2 Label Elements

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

Pictogram(s):



Signal Word: Warning

Hazard Statement(s):

H315 Causes skin irritation. H319 Causes serious eye irritation.

Precautionary Statement(s):

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see Section 4).

P332+313 If skin irritation occurs: Get medical advice/attention.
P337+313 If eye irritation persists: Get medical advice/attention.
P362+364 Take off contaminated clothing and wash it before reuse.

2.3 Other Hazards - None

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

## 3.1 Substances

Not applicable.

# 3.2 Mixtures

Component	CAS No.	EC No.	Index No.	Classification	Conc.
Sulfuric Acid	7664-93-9	231-639-5	016-020-00-8	H315, H319	= 9.8 %
Water	7732-18-5	231-791-2			= 90.2 %

### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

#### General Advice

Consult a doctor and show this safety data sheet.

#### If Inhaled

Move person into fresh air. If not breathing, give artificial respiration. Consult a physician. Show this MSDS.

#### In Case of Skin Contact

Immediately take off contaminated clothing or shoes. Wash with plenty of soap and water. Consult a physician.

#### In Case of Eye Contact

Rinse thoroughly with water for at least 15 minutes and immediately consult a physician.

#### If Swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Immediately consult a physician. Show this MSDS.

#### 4.2 Most important symptoms and effects, both acute and delayed

See Section 11

## 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

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

#### 5.2 Special hazards arising from the substance or mixture

In case of fire, toxic and corrosive gases may be formed.

#### 5.3 Precautions for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## 6. ACCIDENTIAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Use appropriate personal protective equipment to prevent contamination of skin, eyes and personal clothing. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

#### 6.2 Environmental precautions

Keep away from drains.

## 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. 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 inhalation of vapour or mist. Use normal measures for preventive fire protection.

## 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

# 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 with adequate ventilation including local extraction. Ensure that eyewash stations and safety showers are close to the workstation location.

# Personal Protective Equipment

# Eye / Face Protection

Wear approved safety goggles.

### **Skin Protection**

Handle with protective gloves, plastic or rubber. 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.

# **Body Protection**

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved. Wear suitable protective clothing as protection against splashing or contamination.

#### **Respiratory Protection**

In case of inadequate ventilation, use a suitable respirator. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Solubility(ies)

Soluble

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

AppearanceColorless liquidVapor PressureNo data available.OdorPungentVapor DensityNo data available.Odor ThresholdNo data available.Relative DensityNo data available.

pH ~1

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. Limits

## 9.2 Other safety information

No data available.

#### 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

Contact with metals produces highly flammable hydrogen gas. Addition of water liberates excessive heat.

### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

#### 10.4 Conditions to avoid

Bases, Halides, Metals, Alkalis, Acetonitrile.

#### 10.5 Incompatible materials

Most metals, oxidizers, reducers, bases, metal carbonates, cyanides, sulphides, carbides, oxides, metal acetylides, hydrides, halogens, organic or combustible materials, percholorates, acetonitrile, permanganates, alcohols, picrates.

# 10.6 Hazardous decomposition products

Products formed under fire conditions: oxides of sulphur, hydrogen gas.

### 11. TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

### **Acute Toxicity**

Can cause severe burns upon contact while the vapours or mist are corrosive and can cause severe irritation or damage to the nose, throat and lungs. Ingestion of this product causes pain, nausea and vomiting and may be fatal if large doses are ingested.

### Skin Corrosion / Irritation

Can cause severe burns.

# Serious Eye Damage / Irritation

Can cause severe burns.

## 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**

Can cause severe burns.

#### Symptoms / Routes of Exposure

Inhalation: Harmful if inhaled. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Material is

extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Ingestion: Harmful if swallowed. Irritating to mouth, throat and stomach. Causes burns.

Skin: Causes skin irritation / causes burns.

Eves: Causes serious eye irritation / causes burns.

Eyes: Causes serious eye iintation / causes burns

Delayed / Immediate Repeated skin contact with this product may lead to dermatitis while repeated inhalation may cause bronchitis, conjunctivitis, respiratory infections,

Effects: emphysema and digestive disturbances. May cause erosion and discoloration of the teeth.

#### **Additional Information**

Classified based on available data

#### 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

This product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

## 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

No data available.

#### 12.6 Other adverse effects

No data available.

#### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

#### Product

Dispose of waste in accordance to applicable national, regional, or local regulations.

## **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

UN2796

# 14.2 UN proper shipping name

Battery fluid, acid or Sulfuric acid with not more than 51 percent acid

# 14.3 Transport hazard class(es)

8

## 14.4 Packaging group

II

### 14.5 Environmental hazards

This product is not classified as environmentally hazardous according to the UN Model Regulations, nor a marine pollutant according to the IMDG Code.

### 14.6 Special precautions for users

No data available.

# Additional Transport Information

No data available.

# 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): On TSCA Inventory

SARA 313: Not applicable.

SARA 311/312: Acute health hazard CERCLA Reportable Quantity: 1000 lbs.

California Proposition 65:

Sulfuric Acid 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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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



Version SDS Revision Date 5/23/2019 **www.rndsystems.com** 

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

1.1 Product Identifiers

Product Name: Wash Buffer Concentrate (contains Proclin 300 Mixture = .025%)

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
 Telephone:
 1-800-343-7475

 614 McKinley Place NE
 Fax:
 1-612-656-4400

Minneapolis, MN 55413, USA

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:

Oakville, ON L6M 2V5 Email address: Canada.inquiries@bio-techne.com

902-827-6402

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 Telephone Number

Emergency Tel: US: 612-379-2956 or 800-343-7475 / Europe: +44(0)1235-529449

## 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

This substance does not meet the classification criteria of the EC Directives 67/548/EEC, 1999/45/EC, 1272/2008 [CLP], GHS or 29 CFR 1910.1200 [OSHA].

#### 2.2 Label Elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other Hazards - None

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Not applicable.

3.2 Mixtures

Component	CAS No.	EC No.	Index No.	Classification	Conc.	
Proclin 300 Mixture = .025% (active 96118-96-6 ingredients)						
Mixture of 5-Chloro-2-Methyl-4- Isothiazolin-3-One (26172-55-4) and 2-Methyl-4-Isothiazolin-3- One (2682-20-4)			613-167-00-5		= 0.025 %	

## 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. 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

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

# 4.3 Indication of immediate medical attention and special treatment needed

#### 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

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 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**

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. Solubility(ies) На No data available. No data available. Melting / Freezing Point No data available. No data available. **Partition Coefficient Boiling Point / Range** No data available. No data available. **Autoignition Temperature** 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. No data available

Limits

Upper / Lower Flammability or Explosive No data available.

**Oxidizing Properties** 

# Other safety information

No data available.

#### 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

9.2

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.

#### TOXICOLOGICAL INFORMATION 11.

#### 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

There may be irritation of the throat with a feeling of tightness in the chest. Inhalation:

Ingestion: There may be irritation of the throat.

There may be mild irritation at the site of contact. Skin:

There may be irritation and redness. Eyes:

Delayed / Immediate Effects:

No known symptoms:

### **Additional Information**

Classified based on available data

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

#### 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.

#### 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:
Proclin 300 Mixture = .025%

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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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