

# Safety Data Sheet

## For Multidrug Resistance Activity Kit

Catalog No: 3330



### Calcein AM, 4 mM solution in DMSO

#### SECTION 1: Identification of the Substances and the Company/Undertaking

Identification of the Substance or Mixture **Product Name:** Calcein AM, 4 mM solution in DMSO **Catalog Number:** 3330

##### Company/Undertaking Identification

Ion Biosciences  
3055 Hunter Road, Box 3  
San Marcos, TX 78666  
+1 512.957.9123

##### 24 hour Emergency Response

866.536.0631  
301.431.8585  
+1 301.431.8585 (Outside the U.S.)  
For Research Use Only. Not for use in diagnostic procedures.

#### SECTION 2: Hazards Identification

##### GHS - Classification

**Signal word:** WARNING

**Hazard Pictograms:** None.

**Health Hazards:** Not hazardous.

**Physical Hazards:** GHS Physical Hazard– Flammable liquids– Category 4

**Hazard statements:** H227– Combustible liquid.

##### Precautionary Statements

**Prevention:** P210– Keep away from heat, sparks, open flames, other ignition sources. No smoking.

**Response:** P370 + P378– In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Storage:** P403– Store in well-ventilated place.

**Disposal:** P501– Dispose of contents/container to an approved waste disposal plant.

##### HMIS

Health	1
Flammability	2
Reactivity	0

#### SECTION 3: Composition/Information on Ingredients

Name	CAS No.	EC No.	Index No.	Weight %	Classification according to regulation (EC)No1278/2008
DMSO	67-68-5	200-664-3	-	95-100%	NA
Calcein AM	148504-34-1	200-664-3		0-5%	

#### SECTION 4: First Aid Measures

**Skin contact:** Rinse skin with water. Immediate medical attention is not required.

**Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Ingestion:** Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

**Inhalation:** Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

**Most important symptoms and effects, both acute and delayed:** H227– Combustible liquid.

**Notes to physician:** Treat symptomatically.

## SECTION 5: Firefighting Measures

### Extinguishing Media

**Suitable extinguishing media:** Water spray. Carbon Dioxide (CO<sub>2</sub>) Foam. Dry chemical.

**Unsuitable extinguishing media:** Not known.

**Specific hazards arising from the chemical:** Not known.

**Advice for firefighters:** Standard procedure for chemical fires.

## SECTION 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Use personal protection equipment. See section 8 for more information.

**Methods and material for containment and cleaning up:** Soak up with inert absorbent material.

**Reference to other sections:** See section 8 for more information.

**Environmental precautions:** No special environmental precautions required.

## SECTION 7: Handling and Storage

**Handling:** Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

**Conditions for safe storage, including any incompatibilities:** Store at -20°C. Protect from light and moisture.

**Specific end use(s):** For research use only.

## SECTION 8: Exposure Controls/Personal Protection

### Control Parameters

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Dimethylsulfoxide	None	None	None	None

**Engineering measures:** Ensure adequate ventilation, especially in confined areas.

**Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment.

### Exposure Controls

**Hand protection:** Wear suitable gloves. Glove material: Compatible chemical resistant gloves.

**Personal Protective Equipment:** Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

**Eye protection:** Tight sealing safety goggles.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls:** No special environmental precautions required.

## SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties.

**Appearance:** Liquid.

**Odor:** No data available.

**Odor threshold:** No data available.

**pH:** 6-8

**Boiling point/boiling range:** No data available.

**Melting point/melting range:** No data available.

**Flash point:** No data available.

**Evaporation rate:** No data available.

**Flammability:** No data available.

**Explosive Limits:** No data available.

**Vapor pressure:** No data available.

**Vapor density:** No data available.

**Relative density:** No data available.

**Solubility:** No data available.

**Partition coefficient (n-octanol/water):** No data available.

**Autoignition temperature:** No data available.

**Decomposition temperature:** No data available.

**Viscosity:** No data available.

**Explosive properties:** No data available.

**Oxidizing properties:** No data available.

## SECTION 10: Stability and Reactivity

**Reactivity:** None known.

**Stability:** Stable under normal conditions.

**Possibility of hazardous reactions:** Hazardous reaction has not been reported.

**Conditions to avoid:** None under normal processing.

**Incompatible materials:** Strong acids. Strong oxidizing agents.

**Hazardous decomposition products:** No data available.

## SECTION 11: Toxicological Information

**Acute Toxicity DMSO:**

<b>Oral LD50</b>	14,500 mg/kg
<b>Dermal LD50</b>	>40000 mg/kg bw
<b>Inhalation LC50</b>	>5000 mg/l

### Principle Routes of Exposure

**Acute toxicity:** Data are conclusive but insufficient for classification.

**Skin corrosion:** Mild skin irritant. Mild eye irritant. Components of the product may be absorbed through the skin.

**Serious eye damage/irritation:** Data are conclusive but

**Respiratory or skin sensitization:** Data are conclusive but insufficient for classification.

**Specific target organ toxicity– single exposure:** Data are conclusive but insufficient for classification.

**Specific target organ toxicity– repeated exposure:** Data are conclusive but insufficient for classification.

**Carcinogenicity:** Data are conclusive but insufficient for classification.

**Germ cell mutagenicity:** Data are conclusive but insufficient for classification.

**Reproductive toxicity:** Data are conclusive but insufficient for classification.

## SECTION 12: Ecological Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Microtox Data	log Pow
Dimethylsulfoxide	Skeletonema costatum EC5012350– 25500 mg/L (96 h)	Daphnia species EC50=7000 mg/L (24 h)	No data available.	No data available.	logPow-2.03

**Ecotoxicity:** Contains no substances known to be hazardous in waste water treatment plants.

**Mobility in soil:** No information available.

**Persistence and degradability:** Inherently biodegradable.

**Bioaccumulation potential:** Does not bioaccumulate.

**Results of PBT and vPvB assessment:** This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other adverse effects:** No information available.

## SECTION 13: Disposal Considerations

**Waste treatment methods:** The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique.

Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

## SECTION 14: Transport Information

**IATA/ADR/DOT-US/IMDG:** Not classified as dangerous in the meaning of transport regulations.

**UN number:** Not applicable.

**UN proper shipping name:** Not applicable.

**Transport hazard class(es):** Not applicable.

**Packing group:** Not applicable.

**Environmental hazards:** Not applicable.

**Special precautions for use:** Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable.

## SECTION 15: Regulatory Information

Component	US TSCA
Dimethylsulfoxide 67-68-5	Listed

### US Federal Regulations

**SARA 313:** This product is not regulated by SARA.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):** This product does not contain HAPs.

### US State Regulations

**California Proposition 65:** This product does not contain any Proposition 65 chemicals.

**WHMIS Hazard Class:** B3- Combustible liquid. This product has been classified in accordance with the hazard criteria of the

## SECTION 16: Other Information

For Research Use Only. Not for use in diagnostic procedures.

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

# Safety Data Sheet



## 1000X Cyclosporine A in Ethanol

### SECTION 1: Identification of the Substances and the Company/Undertaking

Identification of the Substance or Mixture **Product Name:** 1000X Cyclosporine A in Ethanol **Catalog No:** 3330

#### Company/Undertaking Identification

Ion Biosciences  
3055 Hunter Road, Box 3  
San Marcos, TX 78666  
+1 512.957.9123

#### 24 hour Emergency Response

866.536.0631  
301.431.8585  
+1 301.431.8585 (Outside the U.S.)  
For Research Use Only. Not for use in diagnostic procedures.

### SECTION 2: Hazards Identification

#### GHS - Classification

**Signal word:** Danger

**Hazard Pictograms:**



**Health Hazards:** Acute toxicity, Oral – Category 4, H302, Carcinogenicity– Category 1B, H350, Reproductive toxicity– Category 1B, H360

**Physical Hazards:** GHS Physical Hazard– Caution: Physiologically highly active, therapeutically usable substance.

**Hazard statements:** H302– Harmful if swallowed.  
H350– May cause cancer.  
H360– May damage fertility or the unborn child.

#### Precautionary Statements

**Prevention:** P201– Obtain special instructions before use.  
P202– Do not handle until all safety precautions have been read and understood.

P264– Wash hands thoroughly after handling.  
P270– Do not eat, drink, or smoke when using this product.  
P280– Wear protective gloves/protective clothing/eye protection/face protection.  
**Response:** P301+ P312 – IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P308 + P313– If exposed or concerned: Get medical advice/attention.  
P330 – Rinse mouth.  
**Storage:** P405 – Store locked up.  
**Disposal:** P501– Dispose of contents/container to an approved waste disposal plant.

#### HMIS

Health	1
Flammability	0
Reactivity	0

### SECTION 3: Composition/Information on Ingredients

Name	CAS No.	EC No.	Index No.	Weight %	Classification according to regulation (EC)No1278/2008
Cyclosporine A	59865-13-3	611-907-1	-	< = 0.1%	Acute Tox. 4; Carc. 1B; Repr. 1B; H302, H350, H360
Ethanol	64-17-5	200-578-6	-	<= 99.9%	-

### SECTION 4: First Aid Measures

**Skin contact:** Immediately wash skin with soap and water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur.

**Eye contact:** Hold eyelids apart and flush eyes with water for at least 15 minutes. Have eyes examined and tested by a medical professional.

**Ingestion:** Wash out mouth with water provided person is conscious. Get medical attention. Do NOT induce vomiting

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate attention.

**Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are described in section 2 and/or in section 11.

**Notes to physician:** Treat symptomatically.

## SECTION 5: Firefighting Measures

### Extinguishing Media

**Suitable extinguishing media:** Water spray, alcohol-resistant foam, dry chemical or carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media:** Not known.

**Specific hazards arising from the chemical:** Hazardous decomposition products formed under fire conditions— carbon oxides, nitrogen oxides.

**Advice for firefighters:** Standard procedure for chemical fires.

## SECTION 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and material for containment and cleaning up:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## SECTION 7: Handling and Storage

**Handling:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventative fire protection.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: -20°C.

## SECTION 8: Exposure Controls/Personal Protection

### Control Parameters/Exposure Limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Cyclosporine A	None	None	None	None

**Engineering Measures:** Ensure adequate ventilation, especially in confined areas.

### Exposure Controls

**Personal Protective Equipment:** Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

**Hand protection:** Wear suitable gloves. Glove material: Compatible chemical resistant gloves.

**Skin and Body protection:** Wear suitable protective clothing.

**Respiratory protection:** In case of insufficient ventilation, wear respirators and components tested and approved under appropriate government standards.

**Eye protection:** Tight sealing safety glasses.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties.

**Appearance:** Clear solution.

**Odor:** No data available.

**Odor threshold:** No data available.

**pH:** No data available.

**Boiling point/boiling range:** No data available.

**Melting point/melting range:** No data available.

**Flash point:** No data available.

**Evaporation rate:** No data available.

**Flammability:** No data available.

**Explosive Limits:** No data available.

**Vapor pressure:** No data available.

**Vapor density:** No data available.

**Relative density:** No data available.

**Solubility:** Soluble in EtOH, MeOH, DMSO & DMF.

**Partition coefficient (n-octanol/water):** No data available.

**Autoignition temperature:** No data available.

**Decomposition temperature:** No data available.

**Viscosity:** No data available.

**Explosive properties:** No data available.

**Oxidizing properties:** No data available.

## SECTION 10: Stability and Reactivity

**Reactivity:** None known.

**Stability:** Stable under recommended storage conditions.

**Conditions to avoid:** Heat.

**Materials to avoid:** Alkali metals, aluminum, strong oxidizing agents.

**Hazardous decomposition products:** Hazardous decomposition products formed under fire conditions.—Carbon oxides, nitrogen oxides.

## SECTION 11: Toxicological Information

Information on toxicological effects

<b>Oral LD50</b>	Rat– 1,480 mg/kg.
<b>Intraperitoneal LD50</b>	Rat– 147 mg/kg.
<b>Subcutaneous LD50</b>	Rat– 286 mg/kg.

Principal Routes of Exposure

**Acute Toxicity:** Data are conclusive but insufficient for classification.

**Skin corrosion/irritation:** No data available.

**Serious eye damage/irritation:** No data available.

**Respiratory or skin sensitization:** No data available.

**Carcinogenicity:** Contains a known or suspected carcinogen.

IARC: 1– Group 1: Carcinogen to humans.

NTP: Known to be a human carcinogen.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Germ cell mutagenicity:** No data available.

**Reproductive toxicity:** May cause reproductive disorders.

**Teratogenicity:** Presumed human reproductive toxicant.

**Aspiration hazard:** No data available.

GHS

**Specific target organ toxicity– single exposure:** No data available.

**Specific target organ toxicity– repeated exposure:** No data available.

## SECTION 12: Ecological Information

**Ecotoxicity:** Avoid release into the environment. Runoff from fire control or dilution may cause pollution.

**Mobility in soil:** No information available.

**Persistence and degradability:** No information available.

**Bioaccumulative potential:** No information available.

**Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/conducted.

**Other adverse effects:** No information available.

## SECTION 13: Disposal Considerations

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**Waste treatment methods:** Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

No mixing with other waste. Handle uncleaned containers like the product itself. Dispose in accordance with local, state, and federal regulations.

## SECTION 14: Transport Information

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**IATA/ADR/DOT-US/IMDG:** Not classified as dangerous in the meaning of transport regulations.

**UN number:** Not applicable.

**Transport hazard class(es):** Not applicable.

**Environmental hazards:** Not applicable.

**Special precautions for use:** Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable.

## SECTION 15: Regulatory Information

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### US Federal Regulations

**SARA 302:** No chemical in this material are subject to reporting requirements of SARA 302.

**SARA 313:** This material does not contain and chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA 313.

**SARA 311/312:** Acute health hazard, Chronic health hazard.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):** This product does not contains HAPs.

### US State Regulations

**California Proposition 65:** Warning: This product can expose you to chemicals which are known to the State of California to cause cancer.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

## SECTION 16: Other Information

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For Research Use Only. Not for use in diagnostic procedures.

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"



# Safety Data Sheet



## 1X HEPES-Buffered Hank's Balanced Salt Solution

### SECTION 1: Identification of the Substances and the Company/Undertaking

Identification of the Substance or Mixture **Product Name:** 1X HEPES-Buffered Hank's Balanced Salt Solution **Catalog Numbers:** 7001

#### Company/Undertaking Identification

Ion Biosciences  
3055 Hunter Road, Box 3  
San Marcos, TX 78666

#### 24 hour Emergency Response

866.536.0631  
301.431.8585  
+1 301.431.8585 (Outside the U.S.)  
For Research Use Only. Not for use in diagnostic procedures.

### SECTION 2: Hazards Identification

#### GHS - Classification

**Signal word:** None.  
**Health Hazards:** Not hazardous.  
**Physical Hazards:** Not hazardous.  
**Environmental Hazards:** Not hazardous.  
**Hazard statements:** None.

#### Precautionary Statements

**Prevention:** None.  
**Response:** None.  
**Storage:** None.  
**Disposal:** None.

#### Potential Health Effects

**Eyes:** No data available.  
**Skin:** No data available.  
**Inhalation:** No data available.  
**Ingestion:** No data available.

#### Specific Effects

**Carcinogenic effects:** None.  
**Mutagenic effects:** None.  
**Reproductive toxicity:** None.  
**Sensitization:** None.  
**Target organ effects:** No data available.

#### HMIS

Health	0
Flammability	0
Reactivity	0

### SECTION 3: Composition/Information on Ingredients

Handle all chemicals with caution.

Component	CAS-No	EINECS-No	Weight%
HHBSS	-	-	Withheld

### SECTION 4: First Aid Measures

**Skin contact:** Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.

**Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Ingestion:** Get medical advice/attention if you feel unwell. Rinse mouth.

**Inhalation:** Get medical advice/attention if you feel unwell.

**Most important symptoms and effects, both acute and delayed:** No data available.

**Notes to physician:** Treat symptomatically.

**Indication of any immediate medical attention and special treatment needed:** No data available.

## SECTION 5: Firefighting Measures

### Extinguishing Media

**Suitable extinguishing media:** Water spray. Dry chemical. Carbon Dioxide (CO<sub>2</sub>) Foam.

**Unsuitable extinguishing media:** No data available.

**Specific hazards arising from the chemical:** Not known.

**Advice for firefighters:** Standard procedure for chemical fires.

## SECTION 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Ensure adequate ventilation. Avoid breathing vapors, mist or gas. Always wear recommended Personal Protective Equipment. See Section 8 for more detail.

**Environmental precautions:** No special environmental precautions required.

**Methods and material for containment and cleaning up:** Soak up with inert absorbent material and dispose of as hazardous waste.

**Reference to other sections:** See section 8 for more information.

## SECTION 7: Handling and Storage

**Handling:** Handling is performed in a well ventilated place. Wear suitable protective equipment. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

**Conditions for safe storage, including any incompatibilities:** Keep in a dry, cool and well-ventilated place.

**Specific end use(s):** For research use only.

## SECTION 8: Exposure Controls/Personal Protection

### Control Parameters

#### Exposure limits:

OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
None	None	None	None

**Engineering measures:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Exposure Controls

**Personal Protective Equipment:** Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

**Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment.

**Hand protection:** Wear suitable chemical-resistant gloves.

**Eye protection:** Wear safety glasses with side shields (or goggles).

**Skin and body protection:** Lightweight protective clothing.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls:** No special environmental precautions required.

## SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties.

**Form:** Liquid.

**Appearance:** Clear solution.

**Odor:** No data available.

**Odor threshold:** No data available.

**Boiling point/boiling range:** °C No data available; °F No data available.

**Melting point/melting range:** °C No data available; °F No data available.

**Flash point:** °C No data available; °F No data available.

**Autoignition temperature:** °C No data available; °F No data available.

**Evaporation rate:** No data available.

**Flammability (solid, gas):** No data available.

**Oxidizing properties:** No data available.

**Partition coefficient (n-octanol/water):** No data available.

**Water solubility:** No data available.

**pH:** 7.3

## SECTION 10: Stability and Reactivity

**Reactivity:** No data available.

**Stability:** Stable under normal conditions.

**Materials to avoid:** No data available.

**Possibility of hazardous reactions:** No data available.

**Hazardous decomposition products:** No data available.

**Polymerization:** Hazardous polymerization does not occur.

**Conditions to avoid:** No data available.

## SECTION 11: Toxicological Information

**Acute Toxicity:**

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
HHBSS	No data	No data	No data

**Skin:** No data available.

**Inhalation:** No data available.

**Ingestion:** No data available.

**Carcinogenic effects:** No data available.

**Mutagenic effects:** No data available.

**Reproductive toxicity:** No data available.

**Sensitization:** No data available.

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

Principle Routes of Exposure

Potential Health Effects

**Eyes:** No data available.

## SECTION 12: Ecological Information

**Ecotoxicity:** Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

**Chronic aquatic toxicity:** No data available.

**Mobility:** No data available.

**Biodegradation:** No data available.

**Bioaccumulation:** No data available.

## SECTION 13: Disposal Considerations

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**Waste treatment methods:** The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique.

Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

## SECTION 14: Transport Information

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**IATA/ADR/DOT-US/IMDG:** Not Classified as dangerous in the meaning of transport regulations.

**Proper shipping name:** None.

**Hazard class:** None.

**Subsidiary class:** None.

**Packing group:** None.

**UN-No:** None.

**Environmental hazards:** None.

## SECTION 15: Regulatory Information

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### US Federal Regulations

**SARA 313:** This product is not regulated by SARA.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):** This product does not contain HAPs.

### US State Regulations

**California Proposition 65:** This product does not contain any Proposition 65 chemicals.

**WHMIS Hazard Class:** Non-controlled.

## SECTION 16: Other Information

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For Research Use Only. Not for use in diagnostic procedures.

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

# Safety Data Sheet



## TRS Solution

### SECTION 1: Identification of the Substances and the Company/Undertaking

#### Identification of the Substance or Mixture

**Product Name:** TRS Solution

**Catalog Numbers:** 7060A

#### Company/Undertaking Identification

Ion Biosciences  
3055 Hunter Road, Box 3  
San Marcos, TX 78666

#### 24 hour Emergency Response

866.536.0631  
301.431.8585  
+1 301.431.8585 (Outside the U.S.)

### SECTION 2: Hazards Identification

#### GHS - Classification

**Signal word:** WARNING

**Health Hazards:** H319 - Causes serious eye irritation

**Physical Hazards:** None

**Environmental Hazards:** None

**Hazard statements:** None

#### Precautionary Statements

**Prevention:** P264 - Wash skin thoroughly after handling, P280 - Wear eye protection/ face protection.

**Response:** P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/ attention.

**Storage:** None

**Disposal:** None

#### Potential Health Effects

**Eyes:** Serious eye irritation.

**Skin:** No information available.

**Inhalation:** No information available.

**Ingestion:** No information available.

#### Specific Effects

**Carcinogenic effects:** None.

**Mutagenic effects:** None.

**Reproductive toxicity:** None.

**Sensitization:** None.

**Target organ effects:** No information available.

#### HMIS

Health	2
Flammability	0
Reactivity	0

### SECTION 3: Composition/Information on Ingredients

Handle all chemicals with caution.

Component	CAS-No	EINECS-No	Weight%
Acid Red 27	915-67-3	213-022-2	Withheld

### SECTION 4: First Aid Measures

**Skin contact:** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.

**Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Ingestion:** After swallowing: immediately make victim drink water (two glasses at most). Get medical advice/attention if you feel unwell. Rinse mouth.

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

**Most important symptoms and effects, both acute and delayed:** No data available.

**Notes to physician:** No data available.

**Indication of any immediate medical attention and special treatment needed:** No data available.

## SECTION 5: Firefighting Measures

### Extinguishing Media

**Suitable extinguishing media:** Water spray. Dry chemical. Carbon Dioxide (CO<sub>2</sub>) Foam.

**Unsuitable extinguishing media:** No information available.

**Specific hazards arising from the chemical:** Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Sulphur oxides, Sodium oxides

**Advice for firefighters:** Wear self-contained breathing apparatus if possible.

## SECTION 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. See Section 8 for more detail.

**Environmental precautions:** Do not let product enter drains.

**Methods and material for containment and cleaning up:** Soak up with inert absorbent material and dispose of as hazardous waste.

**Reference to other sections:** See section 8 for more information.

## SECTION 7: Handling and Storage

**Handling:** Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing

**Conditions for safe storage, including any incompatibilities:** Keep in a dry, cool and well-ventilated place.

**Specific end use(s):** For research use only.

## SECTION 8: Exposure Controls/Personal Protection

### Control Parameters

#### Exposure limits:

OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
None	None	None	None

**Engineering measures:** Ensure adequate ventilation, especially in confined areas.

### Exposure Controls

**Personal Protective Equipment:** Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be

**Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment.

**Hand protection:** Wear suitable chemical-resistant gloves.

**Eye protection:** Wear safety glasses with side shields (or goggles).

**Skin and body protection:** Lightweight protective clothing.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls:** Do not let product enter drains.

## SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties.

**Form:** Liquid.

**Appearance:** Deep red solution.

**Odor:** Odorless.

**Odor threshold:** No data available.

**Boiling point/boiling range:** °C No data available; °F No data available.

**Melting point/melting range:** °C No data available; °F No data available.

**Flash point:** °C No data available; °F No data available.

**Autoignition temperature:** °C No data available; °F No data available.

**Evaporation rate:** No data available.

**Flammability (solid, gas):** No data available.

**Oxidizing properties:** No data available.

**Partition coefficient** (n-octanol/water): No data available.

**Water solubility:** 60g/L, 25°C

**pH:** No data available.

## SECTION 10: Stability and Reactivity

**Reactivity:** No data available.

**Stability:** Stable under normal conditions.

**Materials to avoid:** Oxidizing agents.

**Possibility of hazardous reactions:** Hazardous reaction has not been reported.

**Hazardous decomposition products:** Carbon dioxide, Carbon monoxide, Nitrogen oxides (NO<sub>x</sub>), Sulfur oxides.

**Polymerization:** Hazardous polymerization does not occur.

**Conditions to avoid:** Strong heating.

## SECTION 11: Toxicological Information

### Acute Toxicity:

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Acid Red 27	2000mg/kg	No data	No data

**Skin:** (In vitro) No skin irritation.

**Inhalation:** No data available.

**Ingestion:** No data available.

**Carcinogenic effects:** No data available.

**Mutagenic effects:** None.

**Reproductive toxicity:** No data available.

**Sensitization:** No data available.

**Additional Information:** RTECS: QJ6550000

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

### Principle Routes of Exposure

### Potential Health Effects

**Eyes:** (In vitro) Irritating to eyes.

## SECTION 12: Ecological Information

**Ecotoxicity:** Toxicity to algae (356.2 mg/L-72h)

**Chronic aquatic toxicity:** No information available.

**Mobility:** No information available.

**Biodegradation:** Not readily biodegradable.

**Bioaccumulation:** No information available.

## SECTION 13: Disposal Considerations

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**Waste treatment methods:** The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique.

Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

## SECTION 14: Transport Information

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**IATA/ADR/DOT-US/IMDG:** Not Classified as dangerous in the meaning of transport regulations.

**Proper shipping name:** None.

**Hazard class:** None.

**Subsidiary class:** None.

**Packing group:** None.

**UN-No:** None.

**Environmental hazards:** None.

## SECTION 15: Regulatory Information

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### US Federal Regulations

**SARA 313:** This product is not regulated by SARA.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):** This product does not contain HAPs.

### US State Regulations

**California Proposition 65:** This product does not contain any Proposition 65 chemicals.

**WHMIS Hazard Class:** Non-controlled.

## SECTION 16: Other Information

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For Research Use Only. Not for use in diagnostic procedures.

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

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