## Kit Summary

**Product Code(s)**
AB65475

**Product name**
WST-1 Assay Kit (Cell Proliferation)

### Stop Solution

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EC-No</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Classification (Reg. 1272/2008)</th>
<th>REACH Registration Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triton-X-100</td>
<td>-</td>
<td>9002-93-1</td>
<td>10</td>
<td>Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Acute Tox. 4 (H302) Aquatic Chronic 2 (H411)</td>
<td>-</td>
</tr>
<tr>
<td>Sodium lauryl sulfate</td>
<td>205-788-1</td>
<td>151-21-3</td>
<td>5</td>
<td>Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Acute Tox. 4 (H302) Aquatic Chronic 3 (H412)</td>
<td>-</td>
</tr>
</tbody>
</table>

### WST Reagent (lyophilized)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EC-No</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Classification (Reg. 1272/2008)</th>
<th>REACH Registration Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2-(4-Iodophenyl)-3-(4-nitrophenyl)-5-(2,4-disulfophenyl)-2H-tetrazolium)</td>
<td>-</td>
<td>150849-52-8</td>
<td>25</td>
<td>Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332)</td>
<td>-</td>
</tr>
</tbody>
</table>

### Electro Coupling Solution (ECS)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EC-No</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Classification (Reg. 1272/2008)</th>
<th>REACH Registration Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Methoxy-5-methylphenazinium methyl sulfate</td>
<td>265-579-6</td>
<td>65162-13-2</td>
<td>1</td>
<td>Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Carc. 2 (H351) Acute Tox. 4 (H302)</td>
<td>-</td>
</tr>
</tbody>
</table>

### GHS / CLP - GHS - Classification

![GHS symbols]
Signal Word
Danger

Hazard statements
H351 - Suspected of causing cancer
H318 - Causes serious eye damage
H335 - May cause respiratory irritation
H315 - Causes skin irritation
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)
P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P280 - Wear protective gloves/ eye protection/ face protection
P308 + P313 - IF exposed or concerned: Get medical advice/ attention
P264 - Wash face, hands and any exposed skin thoroughly after handling
P362 - Take off contaminated clothing and wash before reuse
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor/ physician
P332 + P313 - If skin irritation occurs: Get medical advice/ attention
P273 - Avoid release to the environment
P405 - Store locked up
P501 - Dispose of contents/ container to an approved waste disposal plant

2.3 Other information
No information available

TRANSPORT INFORMATION

DOT Not dangerous goods
IATA Not dangerous goods
ADR Not dangerous goods
1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Stop Solution

Recommended use: For research use only

Supplier Address: Abcam Inc
1 Kendall Square, Ste 341
Cambridge, MA 02139-1517
USA
Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free)
Fax: (866) 739-9884 or (866) 457-9616 (both US toll free)

E-mail address: technical@abcam.com

Emergency telephone: +1 866 928 0789 (Toll free) /+1 202 464 2554

2. HAZARDS IDENTIFICATION

GHS - Classification

| Skin corrosion/irritation                  | Category 2 |
| Serious eye damage/eye irritation         | Category 1 |
| Chronic aquatic toxicity                  | Category 3 |

GHS Label elements, including precautionary statements

Signal Word: Danger

Hazard statements:
H315 - Causes skin irritation
H318 - Causes serious eye damage
H412 - Harmful to aquatic life with long lasting effects
Precautionary Statements - EU (§28, 1272/2008)
P280 - Wear protective gloves/ eye protection/ face protection
P264 - Wash face, hands and any exposed skin thoroughly after handling
P332 + P313 - If skin irritation occurs: Get medical advice/ attention
P362 - Take off contaminated clothing and wash before reuse
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor/ physician
P273 - Avoid release to the environment
P501 - Dispose of contents/ container to an approved waste disposal plant

Other information

No information available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Classification (Reg. 1272/2008)</th>
</tr>
</thead>
</table>
| Triton-X-100        | 9002-93-1 | 7-13     | Skin Irrit. 2 (H315)  
                  |          |          |   Eye Dam. 1 (H318)  
                  |          |          |   Acute Tox. 4 (H302)  
                  |          |          |   Aquatic Chronic 2 (H411) |
| Sodium lauryl sulfate | 151-21-3 | 3-7      | Skin Irrit. 2 (H315)  
                  |          |          |   Eye Dam. 1 (H318)  
                  |          |          |   Acute Tox. 4 (H302)  
                  |          |          |   Aquatic Chronic 3 (H412) |

For the full text of the H-Statements mentioned in this Section, see Section 16

### 4. FIRST AID MEASURES

#### General advice
Immediate medical attention is required. If symptoms persist, call a physician.

#### Eye contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Immediate medical attention is required. If symptoms persist, call a physician.

#### Skin contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required. If symptoms persist, call a physician.

#### Inhalation
Move to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is required. If symptoms persist, call a physician.

#### Ingestion
Rinse mouth. Do NOT induce vomiting. Immediate medical attention is required. If symptoms persist, call a physician.

#### Notes to physician
Treat symptomatically.

#### Protection of first-aiders
Use personal protective equipment. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
5. FIRE-FIGHTING MEASURES

Flammable properties
Not flammable.

Flash point
not determined

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Explosion Data
Sensitivity to Mechanical Impact
None.
Sensitivity to Static Discharge
None.

Protective equipment and precautions for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Try to prevent the material from entering drains or water courses.

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water. Prevent product from entering drains. Dam up.

7. HANDLING AND STORAGE

Advice on safe handling
Ensure adequate ventilation. Wear personal protective equipment. Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist.

Technical measures/Storage conditions

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering measures
Showers
Eyewash stations
Ventilation systems

Personal protective equipment
Eye/face protection
Tightly fitting safety goggles. Face-shield.

Skin and body protection
Long sleeved clothing. Protective gloves.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures
When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>No information available.</td>
<td>Odor</td>
<td>No information available.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
<td>Physical State @20°C</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
<td>Autoignition temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No information available</td>
<td>Boiling point/boiling range</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td>Flammability Limits in Air</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No information available</td>
<td></td>
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<tr>
<td>Specific Gravity</td>
<td>No data available</td>
<td>solubility</td>
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</tr>
<tr>
<td>Evaporation rate</td>
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<td>Vapor Pressure @20°C (kPa)</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
<td>VOC Content(%)</td>
<td>Not applicable</td>
</tr>
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</table>

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Incompatible products: None known based on information supplied.

Conditions to avoid: None known based on information supplied.

Hazardous decomposition products: None known based on information supplied.

Hazardous polymerization: Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product Information: Corrosive to skin, eyes and/or respiratory tract. Irritating to skin, eyes and/or respiratory tract.

Inhalation: Corrosive by inhalation Causes burns May cause irritation of respiratory tract.

Eye contact: Causes burns Corrosive to eyes May cause irritation.

Skin contact: Corrosive Causes burns May cause irritation.

Ingestion: Causes burns Ingestion may cause irritation to mucous membranes.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triton-X-100</td>
<td>1800 mg/kg (Rat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium lauryl sulfate</td>
<td>1200 mg/kg (Rat)</td>
<td>2000 mg/kg (Rabbit)</td>
<td>3900 mg/m³ (Rat) 1 h</td>
</tr>
</tbody>
</table>

Chronic toxicity

Chronic toxicity: Avoid repeated exposure.

Target Organ Effects: None known.
12. ECOLOGICAL INFORMATION

Ecotoxicity
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to microorganisms</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium lauryl sulfate</td>
<td>53: 72 h Desmodesmus subspicatus mg/L EC50 3.59 - 15:6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static</td>
<td>8-12.5: 96 h Pimephales promelas mg/L LC50 static 15-18.9: 96 h Pimephales promelas mg/L LC50 static 22.1-22.8: 96 h Pimephales promelas mg/L LC50 static 4.3-8.5: 96 h Oncorhynchus mykiss mg/L LC50 static 4.6: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 4.2: 96 h Oncorhynchus mykiss mg/L LC50 7.97: 96 h Brachydanio rerio mg/L LC50 flow-through 9.9-20.1: 96 h Brachydanio rerio mg/L LC50 semi-static 4.06-5.75: 96 h Lepomis macrochirus mg/L LC50 static 4.2-4.8: 96 h Lepomis macrochirus mg/L LC50 flow-through 4.5: 96 h Lepomis macrochirus mg/L LC50 5.8-7.5: 96 h Pimephales promelas mg/L LC50 static 10.2-22.5: 96 h Pimephales promelas mg/L LC50 semi-static 6.2-9.6: 96 h Pimephales promelas mg/L LC50 13.5-18.3: 96 h Poecilia reticulata mg/L LC50 semi-static 10.8-16.6: 96 h Poecilia reticulata mg/L LC50 1.31: 96 h Cyprinus carpio mg/L LC50 semi-static</td>
<td>1.8: 48 h Daphnia magna mg/L EC50</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>log Pow</th>
</tr>
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<tbody>
<tr>
<td>Sodium lauryl sulfate</td>
<td>1.6</td>
</tr>
</tbody>
</table>

13. DISPOSAL CONSIDERATIONS

Waste disposal methods
This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging
Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT
Not dangerous goods

IATA
Not dangerous goods
15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>no</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>no</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>no</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>no</td>
</tr>
</tbody>
</table>

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

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

U.S. State Right-to-Know Regulations

International Regulations

WHMIS Note:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.
16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3
H302 - Harmful if swallowed H315 - Causes skin irritation H318 - Causes serious eye damage H411 - Toxic to aquatic life with long lasting effects

Hazard statements
H315 - Causes skin irritation
H318 - Causes serious eye damage
H412 - Harmful to aquatic life with long lasting effects

Revision Date 15-Nov-2019
Revision Note No information available.

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of MSDS
1. PRODUCT AND COMPANY IDENTIFICATION

Product name: WST Reagent (lyophilized)

Recommended use: For research use only

Supplier Address: Abcam Inc
1 Kendall Square, Ste 341
Cambridge, MA 02139-1517
USA
Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free)
Fax: (866) 739-9884 or (866) 457-9616 (both US toll free)

E-mail address: technical@abcam.com

Emergency telephone: +1 866 928 0789 (Toll free) /+1 202 464 2554

2. HAZARDS IDENTIFICATION

GHS - Classification

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Specific target organ systemic toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

GHS Label elements, including precautionary statements

Signal Word
Warning

Hazard statements
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
Precautionary Statements - EU (§28, 1272/2008)
P271 - Use only outdoors or in a well-ventilated area
P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
P280 - Wear protective gloves/ eye protection/ face protection
P264 - Wash face, hands and any exposed skin thoroughly after handling
P312 - Call a POISON CENTER or doctor/ physician if you feel unwell
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P362 - Take off contaminated clothing and wash before reuse
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/ container to an approved waste disposal plant

Other information
No information available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Classification (Reg. 1272/2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2-(4-Iodophenyl)-3-(4-nitrophenyl)-5-(2,4-disulfophenyl)-2H-tetrazolium)</td>
<td>150849-52-8</td>
<td>15-40</td>
<td>Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332)</td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16

### 4. FIRST AID MEASURES

#### General advice
If symptoms persist, call a physician.

#### Eye contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.

#### Skin contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

#### Inhalation
Move to fresh air. If symptoms persist, call a physician.

#### Ingestion
Rinse mouth. If symptoms persist, call a physician.

#### Notes to physician
Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

#### Flammable properties
Not flammable.

#### Flash point
not determined

#### Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
**Explosion Data**

**Sensitivity to Mechanical Impact**
None.

**Sensitivity to Static Discharge**
None.

**Protective equipment and precautions for firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear to prevent contact with skin and eyes.

---

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**
Use personal protective equipment. Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Environmental precautions**
Try to prevent the material from entering drains or water courses.

**Methods for containment**
Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water. Prevent product from entering drains. Dam up.

---

**7. HANDLING AND STORAGE**

**Advice on safe handling**
Ensure adequate ventilation. Wear personal protective equipment. Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist.

**Technical measures/Storage conditions**

---

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering measures**
Showers
Eyewash stations
Ventilation systems

**Personal protective equipment**

**Eye/face protection**
Tightly fitting safety goggles. Face-shield.

**Skin and body protection**
Long sleeved clothing. Protective gloves.

**Respiratory protection**
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures**
When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>No information available</td>
<td>Odor</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
<td>Physical State @20°C</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
<td>Autoignition temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No information available</td>
<td>Boiling point/boiling range</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td>Flammability Limits in Air</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No data available</td>
<td>solubility</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td>Vapor Pressure @20°C (kPa)</td>
<td>No information available</td>
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<tr>
<td>Vapor density</td>
<td>No data available</td>
<td>VOC Content(%)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

- **Stability**: Stable under recommended storage conditions.
- **Incompatible products**: None known based on information supplied.
- **Conditions to avoid**: None known based on information supplied.
- **Hazardous decomposition products**: None known based on information supplied.
- **Hazardous polymerization**: Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

- **Acute toxicity**
  - **Product Information**: Irritating to skin, eyes and/or respiratory tract.
  - **Inhalation**: May cause irritation of respiratory tract
  - **Eye contact**: May cause irritation
  - **Skin contact**: May cause irritation
  - **Ingestion**: Ingestion may cause irritation to mucous membranes

- **Chronic toxicity**
  - **Chronic toxicity**: Avoid repeated exposure

- **Target Organ Effects**: None known.

12. ECOLOGICAL INFORMATION

- **Ecotoxicity**
  - The environmental impact of this product has not been fully investigated.
13. DISPOSAL CONSIDERATIONS

Waste disposal methods
This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging
Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT
Not dangerous goods

IATA
Not dangerous goods

ADR
Not dangerous goods

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>no</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>no</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>no</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>no</td>
</tr>
</tbody>
</table>

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

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

U.S. State Right-to-Know Regulations

International Regulations

WHMIS Note:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.
16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3
H335 - May cause respiratory irritation H315 - Causes skin irritation H319 - Causes serious eye irritation

Hazard statements
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

Revision Date  15-Nov-2019
Revision Note  No information available.

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of MSDS
Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product name
Electro Coupling Solution (ECS)

Recommended use
For research use only

Supplier Address
Abcam Inc
1 Kendall Square, Ste 341
Cambridge, MA 02139-1517
USA
Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free)
Fax: (866) 739-9884 or (866) 457-9616 (both US toll free)

E-mail address
technical@abcam.com

Emergency telephone
+1 866 928 0789 (Toll free) /+1 202 464 2554

2. HAZARDS IDENTIFICATION

GHS - Classification

Carcinogenicity
Category 2

GHS Label elements, including precautionary statements

Signal Word
Warning

Hazard statements
H351 - Suspected of causing cancer

Precautionary Statements - EU (§28, 1272/2008)
P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P281 - Use personal protective equipment as required
P308 + P313 - IF exposed or concerned: Get medical advice/ attention
P405 - Store locked up
P501 - Dispose of contents/ container to an approved waste disposal plant
3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Classification (Reg. 1272/2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Methoxy-5-methylphenazinium methyl</td>
<td>65162-13-2</td>
<td>1-5</td>
<td>Skin Irr. 2 (H315)</td>
</tr>
<tr>
<td>sulfate</td>
<td></td>
<td></td>
<td>Eye Irr. 2 (H319)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Carc. 2 (H351)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 4 (H302)</td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Eye contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.

Skin contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation
Move to fresh air.

Ingestion
Clean mouth with water. Drink plenty of water.

Notes to physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable properties
Not flammable.

Flash point
not determined

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Explosion Data

<table>
<thead>
<tr>
<th>Sensitivity to Mechanical Impact</th>
<th>None.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity to Static Discharge</td>
<td>None.</td>
</tr>
</tbody>
</table>

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear to prevent contact with skin and eyes.
### 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions | Ensure adequate ventilation. |
| Environmental precautions | Try to prevent the material from entering drains or water courses. |
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Pick up and transfer to properly labeled containers. |

### 7. HANDLING AND STORAGE

| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. |
| Technical measures/Storage conditions | Keep containers tightly closed in a dry, cool and well-ventilated place. |

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Exposure Guidelines | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
| Engineering measures | Showers, Eyewash stations, Ventilation systems |
| Personal protective equipment | Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Long sleeved clothing. Protective gloves. |
| Eye/face protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| Skin and body protection | Respiratory protection |
| Respiratory protection | |
| Hygiene measures | Handle in accordance with good industrial hygiene and safety practice. |

### 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | No information available. |
| Odor Threshold | No information available |
| pH | No information available |
| Flash point | No information available |
| Decomposition temperature | No information available |
| Melting point/range | No information available |
| Explosion limits | No information available |
| Specific Gravity | No data available |
| Evaporation rate | No information available |
| Vapor density | No data available |
| Odor | No information available. |
| Physical State @20°C | No information available |
| Autoignition temperature | No information available |
| Boiling point/boiling range | No information available |
| Flammability Limits in Air | No information available |
| Solubility | No information available. |
| Vapor Pressure @20°C (kPa) | No information available |
| VOC Content(%) | Not applicable |
10. STABILITY AND REACTIVITY

Stability
Stable under recommended storage conditions.

Incompatible products
None known based on information supplied.

Conditions to avoid
None known based on information supplied.

Hazardous decomposition products
None known based on information supplied.

Hazardous polymerization
Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Product Information
Product does not present an acute toxicity hazard based on known or supplied information

Chronic toxicity

Mutagenic effects
Possible risks of irreversible effects.

Target Organ Effects
None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods
This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging
Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT
Not dangerous goods

IATA
Not dangerous goods

ADR
Not dangerous goods

15. REGULATORY INFORMATION

U.S. Federal Regulations
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16. OTHER INFORMATION

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H315 - Causes skin irritation H319 - Causes serious eye irritation H351 - Suspected of causing cancer if inhaled H302 - Harmful if swallowed

Hazard statements
H351 - Suspected of causing cancer
Revision Date 15-Nov-2019
Revision Note No information available.

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