

**Product name:** BEL-1 conductive coating fluid  
**Document Nr.:** SDS00152008001

**Date:** October 5th 2022  
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## Section 1: Identification of the substance or mixture and the company

### 1.1. Product Identifier

BEL-1 conductive coating solution (fluid)  
The substance does not require registration according to regulation (EC) N. 1907/2006 (REACH).

### 1.2 Relevant applications of the material and uses advised against

Coating of non-conductive SEM sample with a conductive layer to dissipate charge

### 1.3. Company details

Rave Scientific  
100 Franklin Square Dr.  
Suite 101  
Somerset, NJ 08873  
Telephone: 1-732-898-3828  
Email: [info@ravescientific.com](mailto:info@ravescientific.com)  
Web: [www.ravescientific.com](http://www.ravescientific.com)

### 1.4 Emergency telephone number

Rave Scientific: 1-732-898-3828

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture according to Regulation EC Nr. 1272/2008

|                       |                                  |
|-----------------------|----------------------------------|
| <b>Physical:</b>      | None                             |
| <b>Health:</b>        | Eye irritation, category 1, H320 |
| <b>Environment:</b>   | None                             |
| <b>Other hazards:</b> | None                             |

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## 2.2 Labeling elements in accordance to Regulation EC. Nr 1272/2008

**Hazard pictogram(s):** GHS07



**Signal word:** Warning  
**Hazard statement(s):** H320: Causes eye irritation

### Precautionary statement(s)

**Prevention:**  
P102: Keep out of reach of children  
P260: Do not breath dust/fumes/gas/mist/vapours/spray  
P270: Do not eat, drink or smoke when using this product  
P 271: Use outdoors or in well ventilated area (fume hood)  
P 273: Avoid release to the environment  
P280: Wear protective gloves/protective clothing/eye protection/face protection

**Response:**  
P312: Call a poison center/doctor/physician/first aider if you feel unwell  
P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do. Continue rinsing.  
P337+P313: If eye irritation persists: Get medical attention  
P302+P352: If on skin: Wash with plenty of water and soap.  
P391: Collect spillage

**Storage:** None

**Disposal:** P501-2: Dispose of contents/container to an authorised waste collection point

**Supplemental hazard info:** None

## 2.3 Other hazards

### Results of PBT and vPvB assessment

According to the results of its assessment, the substance is not a PBT or a vPvB

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## Section 3: Composition / information on components

### 3.1. Substances

Not applicable

### 3.2 Mixtures

Proprietary mix of polythiophene-2,5diyl (C<sub>4</sub>H<sub>4</sub>S – CAS 25233-34-5) in aqueous solution (<10%).

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Contact with eyes:** Rinse cautiously with water for several minutes. If possible, remove contact lenses. Continue rinsing.  
**Contact with skin:** No special measures necessary.  
**Inhalation:** No special measures necessary. There is no major dust generation possible.  
**Ingestion:** Rinse mouth. Seek medical assistance if you feel unwell

### 4.2. Important symptoms and effects, either immediate or delayed

**Inhalation:** No information available  
**Ingestion:** No information available  
**Skin contact:** No information available  
**Eye contact:** Irritating to eyes  
Symptoms: redness and pain, impaired vision

### 4.3. Indication of any immediate medical attention and special treatment

**General advice:** If you feel unwell, seek medical advice; show product label if possible  
If symptoms persist, always call a doctor

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## **Section 5: Firefighting Measures**

### **5.1. Extinguishing media**

CO2 or water spray. Do not use water jet.

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

None known

### **5.3 Advice to firefighters**

Fight fire from a safe distance, with adequate cover.  
Do not move the load if exposed to heat.  
In case of fire: do not breathe fumes.  
Wear self-contained breathing apparatus for fire fighting

## **Section 6: Accidental release measures**

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

No special measures are necessary.

### **6.2 Environmental precautions**

Dilute with plenty of water.  
Do not allow to enter public sewers and waterways

### **6.3 Methods and material for containment and clean up**

Absorb spillage with liquid binding material (sand, diatomite, sawdust, universal binders)  
Clean up spills immediately  
Wash spill area with soap and water to remove last traces of residue

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## 6.4 Reference to other sections

For further information see section 7, 8 and 13.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

Ensure good ventilation at workplace.  
Prevent formation of aerosols.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool dry place

### 7.3 Specific end uses(s)

Not required

## Section 8: Exposure control and personal protection

### 8.1. Control parameters

This product does not contain any relevant quantities of materials with critical values which have to be monitored at the workplace

### 8.2 Exposure controls

|                             |   |
|-----------------------------|---|
| <b>Control procedures:</b>  | Ensure adequate ventilation<br>Keep away from foodstuffs, beverages and feed<br>Immediately removed all soiled and contaminated clothing<br>Wash hands before breaks and at end of work |
| <b>Personal protection:</b> | Take precautions to avoid contact with eyes and skin when handling the products   |
| <b>Inhalation:</b>          | In case of insufficient ventilation, wear suitable respiratory equipment  |
| <b>Hands and skin:</b>      | Wear suitable gloves against chemicals; recommended gloves:<br>Nitrile  |
| <b>Eyes:</b>                | Wear safety goggles   |

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## 10.4 Conditions to avoid

Prevent freezing.

## 10.5 Incompatible materials

No further relevant information available.

## 10.6 Hazardous decomposition products

No dangerous decomposition products known.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### Information hazard classes as defined in Regulation (EC) Nr. 1272/2008

|  |                    |
|--|--------------------|
| <b>Inhalation:</b>   | Not classified     |
| <b>Skin contact:</b>                                       | Not classified     |
| <b>Eye contact:</b>  | Irritation to eyes |
| <b>Sensitisation:</b>                                      | Not classified     |
| <b>Germ cell mutagenicity:</b>                             | Not classified     |
| <b>Carcinogenicity:</b>                                    | Not classified     |
| <b>Reproductive toxicity:</b>                              | Not classified     |
| <b>Specific target organ toxicity – single exposure:</b>   | Not classified     |
| <b>Specific target organ toxicity – repeated exposure:</b> | Not classified     |

Toxicological data not available

#### Symptoms related to the physical, chemical and toxicological characteristics

|                           |                                   |
|---------------------------|-----------------------------------|
| <b>If swallowed:</b>      | Data are not available            |
| <b>If in eyes:</b>        | Redness and pain, impaired vision |
| <b>If inhaled:</b>        | Data are not available            |
| <b>If on skin:</b>        | Data are not available            |
| <b>Other information:</b> | Health effects are not known      |

### 11.2. Endocrine disrupting properties

Not listed

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### 11.3. Information on other hazards

There is no additional information

## Section 12: Ecological information

### 12.1. Aquatic toxicity

Shall not be classified as hazardous to the aquatic environment.

### 12.2 Persistence and degradability

No data available

### 12.3 Bio-accumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

No data available

### 12.6 Endocrine disrupting properties

Not listed

### 12.7 Hazardous decomposition products

No information available

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## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Product:** This material and its container must be disposed of in a safe way. Do not discharge into drains or the environment, dispose to an authorised waste collection point.

**National regulations:** Disposal should be in accordance with local, state or national legislation.

## Section 14: Transport information

### 14.1. UN number

UN-number: N/A

### 14.2 UN proper shipping name

Proper shipping name: N/A

### 14.3 Transport hazard class(es)

**Class:** N/A  
**ADR/RID-Classification code:** N/A

### 14.4 Packing group

Packing: N/A

### 14.5 Incompatible materials

**ADR/RID- Environmentally hazardous:** N/A  
**IMDG-Marine pollutant:** N/A  
**IATA/ICAO-Environmentally hazardous:** N/A

### 14.6 Special precautions for user

ADR/RID-Tunnel code: N/A (Contd. on page 10)

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|                |     |                    |
|----------------|-----|--------------------|
| IMDG-Ems:      | N/A | (Contd. of page 9) |
| IATA/ICAO-PAX: | N/A |                    |
| IATA/ICAO-CAO: | N/A |                    |

## 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code

Not applicable

## Section 15: Regulatory information

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

**Restrictions according to REACH, Annex XVII:** Not listed

**List of substance subject to authorization (REACH, Annex XIV)/SVHC – candidate list:** Not listed

### 15.2 Chemical safety assessment

No information available

## Section 16: Other information

### RoHS Directive Compliant

This product is fully compliant with the directive 2100/65/EU Annex II (RoHS). It does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's or PBDE's.

### WEEE

This product is not a piece of electrical or electronic equipment, and it therefore not governed by Directive 2002/96/EC on waste electrical and electronic equipment (WEEE)

### Relevant phrases:

H320: Causes eye irritation

### Abbreviations:

|          |                   |
|----------|-------------------|
| Asp. Tox | Aspiration hazard |
| Carc.    | Carcinogenicity   |
| Exp.     | Exposure          |
| Flam.    | Flammable         |

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# Safety Data Sheet

Regulation EC Nr. 1907/2006 Art.31

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|        |   |
|--------|---|
| GHS    | Global Harmonised System of Classification of Labelling Chemicals           |
| Irrit. | Irritant  |
| N/A    | Not applicable  |
| N/E    | Not estimated   |
| NOEC   | No observed effect concentration  |
| LC50   | Lethal dose single exposure to causing 50% lethality                        |
| LD50   | Lethal dose 50% corresponds to causing 50% lethality during a specific time |
| PBT    | Persistent Bio-accumulative and Toxic                                       |
| WEL    | Workplace Exposure Limit  |
| Repr.  | Reproductive toxicant   |
| RoHS   | Restriction of Hazardous Substance  |
| vPvB   | very Persistent and very Bio-accumulative                                   |
| WEEE   | Waste Electrical and Electronic Equipment                                   |

This product should be stored, handled and used in accordance with good industrial hygiene practices and in accordance with any legal regulation.

The information contained herewith is based on the present state of our knowledge and is intended to describe the product from the point of view of safety requirements. It does not guarantee any specific properties.

It is the responsibility of the user to query and verify any information seeming suspect or where doubt on the validity may exist. The buyer assumes all responsibility of using and handling the product in accordance with local, state, federal and international regulations.

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