# SAFETY DATA SHEET
# TETRAMETHYLRHODAMINE ETHYL ESTER PERCHLORATE

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Product name** TETRAMETHYLRHODAMINE ETHYL ESTER PERCHLORATE

**Synonyms; trade names** TMRE

**CAS number** 115532-52-0

### 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

**Supplier**

Web: www.bio-rad-antibodies.com
Bio-Rad
Endeavour House
Langford Business Park
Kidlington
Oxford
OX5 1GE
antibody_safetydatasheets@bio-rad.com

**Contact person** Technical Services Manager

### 1.4. Emergency telephone number

**Emergency telephone** +1 7037415970 (CHEMTREC)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification (EC 1272/2008)**

**Physical hazards** Not Classified

**Health hazards** Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319

**Environmental hazards** Not Classified

**Classification (67/548/EEC or 1999/45/EC)** Xn;R20/22. Xi;R36/38.

### 2.2. Label elements

**Pictogram**

**Signal word** Warning

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|---|---|
| **Hazard statements** | H302+H332 Harmful if swallowed or if inhaled.<br>H315 Causes skin irritation.<br>H319 Causes serious eye irritation. |
| **Precautionary statements** | P261 Avoid breathing dust.<br>P264 Wash contaminated skin thoroughly after handling.<br>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.<br>P501 Dispose of contents/ container in accordance with national regulations. |
| **Supplementary precautionary statements** | P270 Do not eat, drink or smoke when using this product.<br>P271 Use only outdoors or in a well-ventilated area.<br>P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.<br>P302+P352 IF ON SKIN: Wash with plenty of water.<br>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P321 Specific treatment (see medical advice on this label).<br>P330 Rinse mouth.<br>P332+P313 If skin irritation occurs: Get medical advice/ attention.<br>P337+P313 If eye irritation persists: Get medical advice/ attention.<br>P362+P364 Take off contaminated clothing and wash it before reuse. |

### 2.3. Other hazards

None.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

| | |
|---|---|
| **Product name** | TETRAMETHYLRHODAMINE ETHYL ESTER PERCHLORATE |
| **CAS number** | 115532-52-0 |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

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|---|---|
| **Inhalation** | Move affected person to fresh air at once. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention. |
| **Ingestion** | Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Remove affected person from source of contamination. Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. |
| **Skin contact** | Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing. |
| **Eye contact** | Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. |

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

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| **General information** | The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |

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

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| **Notes for the doctor** | No specific recommendations. |

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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

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

**Specific hazards** Oxides of the following substances: Carbon. Nitrogen. Hydrogen chloride (HCl).

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## SECTION 6: Accidental release measures

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

**Personal precautions** Avoid inhalation of dust. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid contact with eyes. Provide adequate ventilation.

### 6.2. Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Collect and place in suitable waste disposal containers and seal securely. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

### 6.4. Reference to other sections

**Reference to other sections** For waste disposal, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Avoid inhalation of dust and contact with skin and eyes. If ventilation is inadequate, suitable respiratory protection must be worn.

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

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container.

### 7.3. Specific end use(s)

**Specific end use(s)** No data available.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

### 8.2. Exposure controls

**Protective equipment**

**Appropriate engineering controls** Use mechanical ventilation if there is a risk of handling causing formation of airborne dust.

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|---|---|
| **Eye/face protection** | The following protection should be worn: Chemical splash goggles or face shield. |
| **Hand protection** | Use protective gloves. |
| **Other skin and body protection** | Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. |
| **Hygiene measures** | Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke. |
| **Respiratory protection** | If ventilation is inadequate, suitable respiratory protection must be worn. |

## SECTION 9: Physical and Chemical Properties

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

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|---|---|
| **Appearance** | Dusty powder. |
| **Colour** | Various colours. |
| **Odour** | No data available. |
| **pH** | No information available. |
| **Melting point** | No information available. |
| **Initial boiling point and range** | No information available. |
| **Flash point** | No information available. |
| **Evaporation rate** | No information available. |
| **Vapour pressure** | No information available. |
| **Vapour density** | No information available. |
| **Relative density** | No information available. |
| **Solubility(ies)** | No data available. |
| **Partition coefficient** | No information available. |
| **Auto-ignition temperature** | No information available. |
| **Decomposition Temperature** | No information available. |
| **Viscosity** | No information available. |
| **Explosive properties** | No data available. |
| **Oxidising properties** | Not determined. |

### 9.2. Other information

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|---|---|
| **Other information** | Not determined. |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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|---|---|
| **Reactivity** | No data available. |

### 10.2. Chemical stability

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|---|---|
| **Stability** | No data available. |

### 10.3. Possibility of hazardous reactions

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**Possibility of hazardous reactions** Not determined.

### 10.4. Conditions to avoid

**Conditions to avoid** No data available.

### 10.5. Incompatible materials

**Materials to avoid** Strong oxidising agents.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** No data available.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicological effects** No information available.

**Germ cell mutagenicity**

**Genotoxicity - in vitro** Not determined.

**Reproductive toxicity**

**Reproductive toxicity - fertility** Not determined.

**Specific target organ toxicity - single exposure**

**STOT - single exposure** Not determined.

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure** Not determined.

**Aspiration hazard**

**Aspiration hazard** Not determined.

**Inhalation** Harmful by inhalation. May cause respiratory system irritation.

**Ingestion** Harmful if swallowed.

**Skin contact** Harmful in contact with skin. Irritating to skin.

**Eye contact** Irritating to eyes.

**Target organs** Skin Eyes Respiratory system, lungs

## SECTION 12: Ecological Information

**Ecotoxicity** No data on possible environmental effects have been found.

### 12.1. Toxicity

**Toxicity** No data available.

### 12.2. Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available.

**Partition coefficient** No information available.

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### 12.4. Mobility in soil

**Mobility** No data available.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** No information available

### 12.6. Other adverse effects

**Other adverse effects** No data available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** When handling waste, the safety precautions applying to handling of the product should be considered.

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## SECTION 14: Transport information

**Road transport notes** Not classified.

**Rail transport notes** Not classified.

**Sea transport notes** Not classified.

**Air transport notes** Not classified.

### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

Not applicable.

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**
No.

### 14.6. Special precautions for user

Not known.

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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

## SECTION 15: Regulatory information

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

**National regulations** 7.2

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|---|---|
| **EU legislation** | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). |
| **Guidance** | Workplace Exposure Limits EH40.<br>Approved Classification and Labelling Guide (Sixth edition) L131.<br>Safety Data Sheets for Substances and Preparations. |

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

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|---|---|
| **Revision date** | 27/11/2019 |
| **Revision** | 8 |
| **Supersedes date** | 27/11/2019 |
| **SDS number** | 20294 |
| **Risk phrases in full** | R20/22 Harmful by inhalation and if swallowed.<br>R36/38 Irritating to eyes and skin. |
| **Hazard statements in full** | H302 Harmful if swallowed.<br>H315 Causes skin irritation.<br>H319 Causes serious eye irritation.<br>H332 Harmful if inhaled. |

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.