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-No. 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 AbD Serotec
Endeavour House
Langford Business Park
Kidlington
Oxford
OX5 1GE
Tel. +44 (0)1865 852700
Web: www.abdserotec.com
safetydatasheet@abdserotec.com
Contact Person Dr. Salome Stanford

1.4. Emergency telephone number
Tel. +44 (0) 1865 852700 (9.00 a.m. - 5.00 p.m. Mon-Fri)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
Classification (EC 1272/2008)
Physical and Chemical Hazards Not classified.
Human health Acute Tox. 4 - H302; Acute Tox. 4 - H332; Skin Irrit. 2 - H315; Eye Irrit. 2 - H319
Environment Not classified.
Classification (67/548/EEC) Xn; R20/22. Xi; R36/38.
The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements
Label In Accordance With (EC) No. 1272/2008

Signal Word Warning
Hazard Statements
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.

Precautionary Statements
P270 Do not eat, drink or smoke when using this product.
P264 Wash hands/skin thoroughly after handling.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321a Specific treatment (see first aid advice on this label)
P501 Dispose of contents/containers in accordance with local regulations
TETRAMETHYLRHODAMINE ETHYL ESTER PERCHLORATE

Supplementary Precautionary Statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+352 IF ON SKIN: Wash with plenty of soap and water.
P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P313 Get medical advice/attention.
P330 Rinse mouth.
P332+313 If skin irritation occurs: Get medical advice/attention.
P337 If eye irritation persists:
P362 Take off contaminated clothing and wash before reuse.

2.3. Other hazards

None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Product name TETRAMETHYLRHODAMINE ETHYL ESTER PERCHLORATE
CAS-No. 115532-52-0
Gross Formula C26H27CIN2O7

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation
Move the exposed person to fresh air at once. Provide rest, warmth and fresh air. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.

Ingestion
DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Remove victim immediately from source of exposure. Get medical attention immediately! Provide rest, warmth and fresh air.

Skin contact
Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact
Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

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

General information
The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

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

No specific first aid measures noted.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media
Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Specific hazards

5.3. Advice for firefighters

Protective equipment for fire-fighters
Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of dust. Use protective gloves, goggles and suitable protective clothing. Avoid contact with eyes. Provide adequate ventilation.
6.2. Environmental precautions
Do not discharge onto the ground or into water courses.

6.3. Methods and material for containment and cleaning up
Wear necessary protective equipment. Collect in containers and seal securely. Dispose of waste and residues in accordance with local authority requirements.

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

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling
Avoid inhalation of dust and contact with skin and eyes. If ventilation is insufficient, suitable respiratory protection must be provided.

7.2. Conditions for safe storage, including any incompatibilities
Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.2. Exposure controls
Protective equipment

Engineering measures
Provide sufficient ventilation for operations causing dust formation.
Respiratory equipment
If ventilation is insufficient, suitable respiratory protection must be provided.
Hand protection
Use protective gloves.
Eye protection
Use approved safety goggles or face shield.
Other 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 hands 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 & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties
Appearance: Powder, dust
Colour: Varying.
Odour: No data available.
Solubility: No data available.
Initial boiling point and boiling range: No data available.
Melting point (°C): No data available.
Relative density: No data available.
Vapour density (air=1): No data available.
Vapour pressure: No data available.
Evaporation rate
No information available.

pH-Value, Conc. Solution
No information available.

Viscosity
No information available.

Decomposition temperature (°C)
No information available.

Flash point
No information available.

Auto Ignition Temperature (°C)
No information available.

Partition Coefficient
(N-Octanol/Water)
No information available.

Explosive properties
No data available.

Oxidising properties
Not determined.

9.2. Other information
Not determined.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
No data available.

10.2. Chemical stability
No data available.

10.3. Possibility of hazardous reactions
Not determined.

10.4. Conditions to avoid
No data available.

10.5. Incompatible materials
Materials To Avoid
Strong oxidising substances.

10.6. Hazardous decomposition products
No data available.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information
No information available.

Respiratory or skin sensitisation:
Respiratory sensitisation
Not determined.
Skin sensitisation
Not determined.

Germ cell mutagenicity:
Genotoxicity - In Vitro
Not determined.

Reproductive Toxicity:
Reproductive Toxicity - Fertility
Not determined.

Specific target organ toxicity - single exposure:
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STOT - Single exposure
Not determined.

Specific target organ toxicity - repeated exposure:
STOT - Repeated exposure
Not determined.

Aspiration hazard:
Viscosity
Not determined.

Inhalation
Harmful by inhalation. May cause irritation to the respiratory system.

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
Acute Fish Toxicity
No data available.

12.2. Persistence and degradability
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.

12.4. Mobility in soil
Mobility:
No data available.

12.5. Results of PBT and vPvB assessment
No information available

12.6. Other adverse effects
No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

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

13.1. Waste treatment methods
Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

Road Transport Notes  Not Classified
Rail Transport Notes  Not classified.
TETRAMETHYLRHODAMINE ETHYL ESTER PERCHLORATE

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 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
Approved Code Of Practice
Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations. Guidance Notes
Workplace Exposure Limits EH40.
EU Legislation

15.2. Chemical Safety Assessment
No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

SDS No. 20294
Date 05/09/11

Risk Phrases In Full
R20/22  Harmful by inhalation and if swallowed.
R36/38  Irritating to eyes and skin.

Hazard Statements In Full
H319  Causes serious eye irritation.
H315  Causes skin irritation.
H332  Harmful if inhaled.
H302  Harmful if swallowed.