SAFETY DATA SHEET

Tris(3-hydroxypropyltriazolylmethyl)amine


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

1.1. Product identifier

Product name: Tris(3-hydroxypropyltriazolylmethyl)amine
Product number: FT45884
Synonyms; trade names: THPTA
CAS number: 760952-88-3

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory reagent. Manufacture of substances. Research and development.

1.3. Details of the supplier of the safety data sheet

Supplier: Carbosynth Ltd
8&9 Old Station Business Park
Compton
Berkshire
RG20 6NE
UK
+44 1635 578444
+44 1635 579444
info@carbosynth.com

1.4. Emergency telephone number

Emergency telephone: +44 7887 998634

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards: Not Classified
Health hazards: Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335
Environmental hazards: Not Classified

2.2. Label elements

Pictogram

⚠️

Signal word: Warning

Hazard statements: H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
Tris(3-hydroxypropyltriazolylmethyl)amine

Precautionary statements

P264 Wash contaminated skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep 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.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

No data available.

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name Tris(3-hydroxypropyltriazolylmethyl)amine
CAS number 760952-88-3
Chemical formula C₁₈H₃₀N₁₀O₃

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Get medical advice/attention if you feel unwell.

Inhalation Remove person to fresh air and keep comfortable for breathing. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if symptoms are severe or persist.

Ingestion Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if symptoms are severe or persist.

Skin contact Remove contaminated clothing. Rinse with water. Continue to rinse for at least 15 minutes. Wash contaminated clothing before reuse. Get medical attention if symptoms are severe or persist.

Eye contact Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist.

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

General information See Section 11 for additional information on health hazards.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards None known.
Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters
**Tris(3-hydroxypropyltriazolylmethyl)amine**

### Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents. Use protective equipment appropriate for surrounding materials.

### SECTION 6: Accidental release measures

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

**Personal precautions**

Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Avoid inhalation of dust and vapours. Provide adequate ventilation.

#### 6.2. Environmental precautions

**Environmental precautions**

Avoid discharge into drains or watercourses or onto the ground.

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

**Methods for cleaning up**

Wear protective clothing as described in Section 8 of this safety data sheet. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely. Clear up spills immediately and dispose of waste safely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

#### 6.4. Reference to other sections

**Reference to other sections**

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

**Usage precautions**

Wear protective clothing as described in Section 8 of this safety data sheet. Wash hands thoroughly after handling. Provide adequate ventilation. Avoid generation and spreading of dust. Avoid contact with skin and eyes. Avoid inhalation of dust and vapours.

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

**Storage precautions**

Keep container tightly closed. Store contents under inert gas. Store at temperatures between 2°C and 8°C.

#### 7.3. Specific end use(s)

**Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

### SECTION 8: Exposure Controls/personal protection

#### 8.1. Control parameters

**Occupational exposure limits**

No exposure limits known for ingredient(s).

#### 8.2. Exposure controls

**Appropriate engineering controls**

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

**Eye/face protection**

Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Tris(3-hydroxypropyltriazolylmethyl)amine

Hand protection
Wear protective gloves. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection
Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory protection
Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is ‘CE’-marked. Particulate filters should comply with European Standard EN143. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

Environmental exposure controls
Keep container tightly sealed when not in use.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance
Solid.

Odour
No data available.

Odour threshold
No data available.

pH
No data available.

Melting point
331 to 336°C

Initial boiling point and range
No data available.

Flash point
No data available.

Evaporation rate
No data available.

Flammability (solid, gas)
No data available.

Upper/lower flammability or explosive limits
No data available.

Vapour pressure
No data available.

Vapour density
No data available.

Relative density
No data available.

Solubility(ies)
No data available.

Partition coefficient
log Pow: -0.834

Auto-ignition temperature
No data available.

Decomposition Temperature
No data available.

Viscosity
No data available.

Explosive properties
No data available.

Oxidising properties
No data available.

9.2. Other information

Molecular weight
434.50

SECTION 10: Stability and reactivity

10.1. Reactivity
Tris(3-hydroxypropyltriazolylmethyl)amine

Reactivity
No data available.

10.2. Chemical stability
Stability
Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions
No data available.

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity - oral
Notes (oral LD₅₀)
Based on available data the classification criteria are not met.

Acute toxicity - dermal
Notes (dermal LD₅₀)
Based on available data the classification criteria are not met.

Acute toxicity - inhalation
Notes (Inhalation LC₅₀)
Based on available data the classification criteria are not met.

Skin corrosion/irritation
Animal data
Irritating.

Serious eye damage/irritation
Causes serious eye irritation.

Respiratory sensitisation
Based on available data the classification criteria are not met.

Skin sensitisation
Based on available data the classification criteria are not met.

Germ cell mutagenicity
Based on available data the classification criteria are not met.

Genotoxicity - in vitro
Based on available data the classification criteria are not met.

Carcinogenicity
Based on available data the classification criteria are not met.

IARC carcinogenicity
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
Based on available data the classification criteria are not met.

Reproductive toxicity - fertility
Based on available data the classification criteria are not met.

Reproductive toxicity - development
Based on available data the classification criteria are not met.
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Specific target organ toxicity - single exposure

STOT - single exposure  STOT SE 3 - H335 May cause respiratory irritation.

Target organs  Respiratory system, lungs

Specific target organ toxicity - repeated exposure

STOT - repeated exposure  Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard  Not relevant. Solid.

General information

Dust may irritate the eyes and the respiratory system. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation

A single exposure may cause the following adverse effects: Irritation of nose, throat and airway. Difficulty in breathing. Coughing.

Ingestion

May cause irritation.

Skin contact

Redness. Irritating to skin.

Eye contact

Irritating to eyes.

Route of exposure

Ingestion Inhalation Skin and/or eye contact

Target organs  Respiratory system, lungs

SECTION 12: Ecological Information

Ecotoxicity

Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity  Based on available data the classification criteria are not met.

12.2. Persistence and degradability

Persistence and degradability  The degradability of the product is not known.

12.3. Bioaccumulative potential

Bioaccumulative potential  No data available on bioaccumulation.

Partition coefficient  log Pow: -0.834

12.4. Mobility in soil

Mobility  No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment  No data available.

12.6. Other adverse effects

Other adverse effects  None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Tris(3-hydroxypropyltriazolylmethyl)amine

**General information** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered.

**Disposal methods** Mix or dissolve the material in a combustible solvent and burn in chemical incinerator equipped with an afterburner and scrubber.

**SECTION 14: Transport information**

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. **UN number**
Not applicable.

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

14.3. **Transport hazard class(es)**
No transport warning sign required.

14.4. **Packing group**
Not applicable.

14.5. **Environmental hazards**
Environmentally hazardous substance/marine pollutant
No.

14.6. **Special precautions for user**
Not applicable.

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**
Health and Safety at Work etc. Act 1974 (as amended).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.

**EU legislation**

15.2. **Chemical safety assessment**
No chemical safety assessment has been carried out.
**Tris(3-hydroxypropyltriazolylmethyl)amine**

### SECTION 16: Other information

<table>
<thead>
<tr>
<th>Abbreviations and acronyms</th>
<th>Definitions</th>
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<tbody>
<tr>
<td>ADR:</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Road.</td>
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<tr>
<td>ADN:</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</td>
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<tr>
<td>RID:</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Rail.</td>
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<td>IATA:</td>
<td>International Air Transport Association.</td>
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<td>IMDG:</td>
<td>International Maritime Dangerous Goods.</td>
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<td>CAS:</td>
<td>Chemical Abstracts Service.</td>
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<td>ATE:</td>
<td>Acute Toxicity Estimate.</td>
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<td>LC₅₀:</td>
<td>Lethal Concentration to 50% of a test population.</td>
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<tr>
<td>LD₅₀:</td>
<td>Lethal Dose to 50% of a test population (Median Lethal Dose).</td>
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<tr>
<td>EC₅₀:</td>
<td>50% of maximal Effective Concentration.</td>
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<td>PBT:</td>
<td>Persistent, Bioaccumulative and Toxic substance.</td>
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<td>vPvB:</td>
<td>Very Persistent and Very Bioaccumulative.</td>
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**Training advice**
Only trained personnel should use this material.

**Revision date**
16/06/2017

**Revision**
1

**SDS number**
144926

**Hazard statements in full**
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.

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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.