

Material Safety Data Sheet



TRITON B FOR SYNTHESIS
(Benzyltrimethylammonium hydroxide)

VERSION : 01
DATE OF ISSUE : 02-12-2016
SUPERSEDES : Nil

Product Code : 19650

Page 1 of 10

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : TRITON B FOR SYNTHESIS

Product code : 19650

Identification of the product : TRITON B FOR SYNTHESIS

CAS No : 100-85-6

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

Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification : MOLYCHEM

Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA) Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.

Email : info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,
Kulgaon, Badlapur (E), Dist.-Thane-421 503.

2. Hazards identification -DSD

2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Classification : F; R11

T; R23/24/25-R39/23/24/25

C; R34

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Specific Target Organ Toxicity - Single exposure - Category 1 -
Danger (CLP : STOT SE 1) H370

Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301

Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331

Acute toxicity, dermal - Category 3 - Danger (CLP : Acute Tox. 3) H311

Skin corrosion - Category 1B - Danger (CLP : Skin Corr. 1B) H314

Physical hazards : Flammable liquids - Category 2 - Danger (CLP : Flam. Liq. 2) H225

2.2. Label elements

Labelling EC 67/548 or EC 1999/45

Symbol(s) : F : Highly flammable

T : Toxic



R Phrase(s) : R11 : Highly flammable.

R23/24/25 : Toxic by inhalation, in contact with skin and if swallowed.

MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA)

Tel: +91 22 4066 8111, 2205 7772 . **Fax:** + 91 22 2203 4442. **Email :** info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,
Kulgaon, Badlapur (E), Dist.-Thane-421 503

Material Safety Data Sheet



TRITON B FOR SYNTHESIS
(Benzyltrimethylammonium hydroxide)

VERSION : 01
DATE OF ISSUE : 02-12-2016
SUPERSEDES : Nil

Product Code : 19650

Page 2 of 10

R34 : Causes burns.

R39/23/24/25 : Toxic : danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

S Phrase(s) : S7 : Keep container tightly closed.

S16 : Keep away from sources of ignition - No smoking.

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.

S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).

Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms



Signal words : Danger

Hazard statements : H225 : Highly flammable liquid and vapour.

H314 : Causes severe skin burns and eye damage.

H301 : Toxic if swallowed.

H311 : Toxic in contact with skin.

H331 : Toxic if inhaled.

H370 : Causes damage to organ.

Precautionary statements

• **Prevention : P240:** Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical, ventilating, lighting, ..., equipment.

P210: Keep away from heat, sparks, open flames or hot surfaces. – No smoking.

P280: Wear protective gloves, protective clothing, eye protection, face protection.

P271: Use only outdoors or in a well-ventilated area.

P260: Do not breathe dust, fume, gas, mist, vapours, spray.

P233: Keep container tightly closed.

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

• **Response : P307+P311:** IF EXPOSED : Call a POISON CENTER or doctor.

P302+P352: IF ON SKIN : Wash with plenty of soap and water.

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.

P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position

comfortable for breathing.

MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA)

Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442. Email : info@molychem.net

**Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,
Kulgaon, Badlapur (E), Dist.-Thane-421 503**

Material Safety Data Sheet



TRITON B FOR SYNTHESIS
(Benzyltrimethylammonium hydroxide)

VERSION : 01
DATE OF ISSUE : 02-12-2016
SUPERSEDES : Nil

Product Code : 19650

Page 3 of 10

P303+P361+P353: IF ON SKIN (or hair) : Remove immediately all contaminated clothing. Rinse skin with water/shower.

P363: Wash contaminated clothing before reuse.

P361: Remove immediately all contaminated clothing.

P370+P378: In case of fire: Use for extinction.

• **Storage** : P403+P233: Store in well-ventilated place. Keep container tightly closed.

P403+P235: Store in well-ventilated place. Keep cool.

P405: Store locked up.

• **Disposal considerations** : P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

3. Composition/information on ingredients

Substance / Preparation : TRITON B FOR SYNTHESIS

CAS No :100-85-6

Substance.

Contains no other components or impurities which will influence the classification of the product.

4. First aid measures

4.1. Description of first aid measures

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor.

Skin contact : Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label).

Eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Ingestion : Specific treatment (see on this label). Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. Rinse mouth.

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

MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA)

Tel: +91 22 4066 8111, 2205 7772 . **Fax:** + 91 22 2203 4442. **Email :** info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP.Shobhavat Textile Co.,
Kulgaon, Badlapur (E), Dist.-Thane-421 503

Material Safety Data Sheet



TRITON B FOR SYNTHESIS
(Benzyltrimethylammonium hydroxide)

VERSION : 01
DATE OF ISSUE : 02-12-2016
SUPERSEDES : Nil

Product Code : 19650

Page 4 of 10

Symptoms relating to use : Causes damage to organ. Causes severe skin burns and eye damage. Repeated exposure to this material can result in absorption through skin causing significant health hazard. Danger of serious damage to health by prolonged exposure through inhalation. Swallowing a small quantity of this material will result in serious health hazard.

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

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Specific treatment (see on this label). Call a POISON CENTER or doctor.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

Surrounding fires : Use water spray or fog for cooling exposed containers.

5.2. Special hazards arising from the substance or mixture

Flammable class : Highly flammable liquid and vapour.

Hazardous combustion products : Under fire conditions, hazardous fumes will be present. Thermal decomposition generates : Corrosive vapours.

5.3. Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment, including respiratory protection.

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders : Equip cleanup crew with proper protection.

Ventilate area. Avoid breathing dust, fume, gas, mist, vapours, spray.

Technical measures : Use special care to avoid static electric charges.

Special precautions : Remove ignition sources. No naked lights. No smoking.

For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Clean up methods : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Store away from other materials. Collect spillage.

6.4. Reference to other sections

MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA)

Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442. Email : info@molychem.net

**Works: Plot No. B/9, Badlapur M.I.D.C., OPP.Shobhavat Textile Co.,
Kulgaon, Badlapur (E), Dist.-Thane-421 503**

Material Safety Data Sheet



TRITON B FOR SYNTHESIS
(Benzyltrimethylammonium hydroxide)

VERSION : 01
DATE OF ISSUE : 02-12-2016
SUPERSEDES : Nil

Product Code : 19650

Page 5 of 10

See section 8. Exposure controls/personal protection

7. Handling and storage

7.1. Precautions for safe handling

Handling : Handle empty containers with care because residual vapours are flammable. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Do not breathe dust, fume, gas, mist, vapours, spray. Wash contaminated clothing before reuse.

Technical protective measures : Provide good ventilation in process area to prevent formation of vapour. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical, ventilating, lighting, ..., equipment.

Special precautions : No naked lights. No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep only in the original container in a cool, well ventilated place. Keep in fireproof place. Ground/bond container and receiving equipment. Keep container tightly closed.

Storage regulation : Comply with applicable regulations.

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

Specific end use(s) : None.

8. Exposure controls/personal protection

8.1. Exposure controls

Personal protection : Avoid all unnecessary exposure.

- **Respiratory protection :** In case of insufficient ventilation, wear suitable respiratory equipment. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

- **Hand protection :** Wear protective gloves.

- **Skin protection :** Wear suitable protective clothing.

- **Eye protection :** Chemical goggles or face shield.

- **Others :** When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state at 20 °C : Liquid.

Odour threshold : No data available.

Material Safety Data Sheet



TRITON B FOR SYNTHESIS
(Benzyltrimethylammonium hydroxide)

VERSION : 01
DATE OF ISSUE :02-12-2016
SUPERSEDES : Nil

Product Code : 19650

Page 6 of 10

pH value : No data available.
Melting point [°C] : No data available.
Decomposition point [°C] : N/A
Critical temperature [°C] : N/A
Auto-ignition temperature [°C] : N/A
Flammability (solid, gas) : Flammable.
Highly flammable liquid and vapour.
Flash point [°C] : 15 °C
Boiling point [°C] : N/A
Initial boiling point [°C] : N/A
Final boiling point [°C] : N/A
Evaporation rate : N/A
Vapour pressure [20°C] : N/A
Vapour pressure mm/Hg : N/A
Vapour density : N/A
Density [g/cm³] : 0,95
Relative density, gas (air=1) : N/A
Relative density, liquid (water=1) : N/A
Solubility in water [% weight] : Miscible.
Solubility in water : N/A
Log Pow octanol / water at 20°C : No data available.
Solubility : N/A
Viscosity at 40°C [mm²/s] : N/A
9.2. Other information
Explosive properties : N/A
Explosion limits - upper [%] : 36,50%
Explosion limits - lower [%] : 5,50%
Oxidising properties : No data available.

10. Stability and reactivity

10.1. Reactivity

Reactivity : Not established.

10.2. Chemical stability

Chemical stability : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Not established.

10.4. Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA)

Tel: +91 22 4066 8111, 2205 7772 . **Fax:** + 91 22 2203 4442. **Email :** info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP.Shobhavat Textile Co.,
Kulgaon, Badlapur (E), Dist.-Thane-421 503

Material Safety Data Sheet



TRITON B FOR SYNTHESIS
(Benzyltrimethylammonium hydroxide)

VERSION : 01
DATE OF ISSUE : 02-12-2016
SUPERSEDES : Nil

Product Code : 19650

Page 7 of 10

Materials to avoid : Strong acids. Strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.
May release flammable gases. Thermal decomposition generates : Corrosive vapours.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

- **Inhalation :** Toxic if inhaled.
- **Dermal :** Toxic in contact with skin.
- **Ingestion :** Toxic if swallowed.

Corrosion : Causes severe skin burns and eye damage.

Irritation : Based on available data, the classification criteria are not met.

Sensitization : Based on available data, the classification criteria are not met.

Mutagenicity : Based on available data, the classification criteria are not met.

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

Toxic for reproduction : Based on available data, the classification criteria are not met.

STOT-single exposure : Causes damage to organ.

STOT-repeated exposure : Based on available data, the classification criteria are not met.

Aspiration hazard : Based on available data, the classification criteria are not met.

12. Ecological information

12.1. Toxicity

Toxicity information : Not established.

12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

Environmental precautions : Avoid release to the environment.

13. Disposal considerations

MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA)

Tel: +91 22 4066 8111, 2205 7772 . **Fax:** + 91 22 2203 4442. **Email :** info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP.Shobhavat Textile Co.,
Kulgaon, Badlapur (E), Dist.-Thane-421 503

Material Safety Data Sheet



TRITON B FOR SYNTHESIS
(Benzyltrimethylammonium hydroxide)

VERSION : 01
DATE OF ISSUE : 02-12-2016
SUPERSEDES : Nil

Product Code : 19650

Page 8 of 10

13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Special precautions : Hazardous waste due to toxicity.
Handle empty containers with care because residual vapours are flammable.

14. Transport information

14.1. Land transport (ADR-RID)

Proper shipping name : FLAMMABLE LIQUID, CORROSIVE, N.O.S.

UN N° : 2924

H.I. nr : 20110

ADR - Class : 3

Labelling - Transport : 3 : Flammable liquid. 8 : Corrosive substance.

ADR - Classification code : FC

ADR - Group : II

ADR - Packing instructions : P001

ADR - Limited Quantity : 1 L

ADR - Tunnel code : D/E : Bulk or tank carriage: Passage forbidden through tunnels of category D and E. Other carriage: Passage forbidden through tunnels of category E.

14.2. Sea transport (IMDG) [English only]

Proper shipping name : FLAMMABLE LIQUID, CORROSIVE, N.O.S.

UN N° : 2924

IMO-IMDG - Class or division : 3 : Flammable liquid. (8 : Corrosive substance.)

IMO-IMDG - Packing group : II

IMO- IMDG - Packing instructions : P001

IMO-IMDG - Limited quantities : None

IMO-IMDG - Marine pollution : No

EMS-Nr : F-E S-C

14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name : FLAMMABLE LIQUID, CORROSIVE, N.O.S.

UN N° : 2924

IATA - Class or division : 3 : Flammable liquid. (8 : Corrosive substance.)

IATA - Packing group : II

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing : 352

instruction

- Passenger and Cargo - Maximum : 1 L

MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA)

Tel: +91 22 4066 8111, 2205 7772 . **Fax:** + 91 22 2203 4442. **Email :** info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP.Shobhavat Textile Co.,
Kulgaon, Badlapur (E), Dist.-Thane-421 503

Material Safety Data Sheet



TRITON B FOR SYNTHESIS
(Benzyltrimethylammonium hydroxide)

VERSION : 01
DATE OF ISSUE : 02-12-2016
SUPERSEDES : Nil

Product Code : 19650

Page 9 of 10

Quantity/Packing

IATA - Cargo only : ALLOWED

- Cargo only - Packing instruction : 363

- Cargo only - Maximum Quantity/ : 5 L

Packing

IATA - Limited Quantities : 0.5 L

ERG-Nr : 3CH

15. Regulatory information

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

Safety, health and environmental : Ensure all national/local regulations are observed.
regulations/legislation specific for the substance or mixture

REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions.

REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment : It has not been carried out.

16. Other information

Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Further information : None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008 **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

MOLYCHEM Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA)

Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442. Email : info@molychem.net

**Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,
Kulgaon, Badlapur (E), Dist.-Thane-421 503**

Material Safety Data Sheet



TRITON B FOR SYNTHESIS
(Benzyltrimethylammonium hydroxide)

VERSION : 01
DATE OF ISSUE : 02-12-2016
SUPERSEDES : Nil

Product Code : 19650

Page 10 of 10

End of document

Prepared by: MOLYCHEM (INDIA)

For questions contact: MOLYCHEM

Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA)

Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.

Email : info@molychem.net

**Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,
Kulgaon, Badlapur (E), Dist.-Thane-421 503**

(The statements contained herein are offered for informational purposes only and are based upon technical data that MOLYCHEM believes to be accurate. It is intended for use only by persons having the necessary technical skills and at their own discretion and risk. Since conditions and manner of use are outside our control, we make NO WARRANTY, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE.)