

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

1.1 Product Identifiers

Product CodeGRM1165Product NameTetrabutylammonium chloride

1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Produced by	HiMedia Laboratories Pvt. Ltd.
Address	23, Vadhani Indl.Estate, LBS Marg, Mumbai 400 086, India.
Tel. No.	+91-22-2500 0970, +91-22-2500 1607
Fax No.	+91-22-2500 2468

1.4 Emergency Tel. No.

Emergency Tel.No. Please contact the regional HiMedia representation in your country

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Skin corrosion/irritation (Category 2) Serious eye damage/eye irritation (Category 2A)

Classification according to EU Directives 67/548/EEC or 1999/45/EC Irritating to eyes and skin.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal word

Hazard Statement(s)H315Causes skin irritationH319Causes serious eye irritation

Precautionary Statement(s)

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

According to European Directive 67/548/EEC as amended.



R-Phrase(s)

R36/38 Irritating to eyes and skin.

S-Phrase(s)

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

3. Composition/Information on Ingredients

3.1 Substances

Molecular Formula	$C_{16}H_{36}ClN$
Molecular Weight.	277.92

Component		Concentration		
Tetrabutylammonium chloride				
CAS-No.	1112-67-0			
EC-No.	214-195-7			

4. First Aid Measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. consult a physician.

4.2 Most important symptoms and effects, both acute and delayed No data available

4.3 Indication of immediate medical attention and special treatment needed

No data available

5. Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas

5.3 Precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information No data available

6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 **Reference to other sections**

For disposal see Section 13.

7 Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.

7.3 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended Storage Temperature : Store below 30°C

7.3 Specific end uses

No data available

8 Exposure Controls/Personal Protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Hygiene measure

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands face after working with the substance

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (Without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific work place.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK(EN 14387) respirator cartridges as a backup to the engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environment exposure controls Do not empty into drains

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance White to light brown hygroscopic solid or crystals or powder Odour No data available Odour Threshold No data available Odour Threshold No data available No data available pН Melting/freezing point No data available Initial boiling point and boiling range No data available Flash point 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

Water Solubility Partition coefficient: n-octanol/Water Autoignition Temperature Decomposition Temperature Viscosity Explosive properties Oxidizing properties No data available No data available

9.2 Other safety information No data available

10 Stability and Reactivity

- 10.1 Reactivity
- No data available **10.2 Chemical stability**
 - No data available
- **10.3 Possibility of hazardous reactions** No data available
- **10.4** Conditions to avoid No data available
- **10.5 Incompatible materials** Strong oxidizing agents
- **10.6 Hazardous decomposition products** Other decomposition products - No data available

11 Toxicological Information

11.1 Information on toxicoligical effects Acute toxicity No data available Skin corrosion/irritation No data available Serious eye damage/eye irritation No data available **Respiratory or skin sensitisation** No data available Germ cell mutagenicity No data available Carcinogenicity IARC: No component of this product present at levels greater than oregula to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. **Reproductive toxicity** No data available Specific target organ toxicity- single exposure No data available Aspiration hazard No data available

Potential Health Effects Inhalation.

Refer Section 2 Skin Refer Section 2 Eyes Refer Section 2 Ingestion Refer Section 2

Additional Information RTECS : Not Available

12.1 Toxicity

No data available

- **12.2 Persistence and degradability** No data available
- **12.3 Bioaccumulative potential** No data available
- **12.4 Mobility in soil** No data available
- **12.5 PBT and vPvB assessment** No data available
- **12.6 Other adverse effects** No data available

13 Disposal Considerations

13.1 Waste treatments methods Product

Offer surplus and non-recyclable solutions to a licenced disposal company. Contact a licenced professional waste disposal service to dispose of this material.

13.2 Contaminated packaging

Dispose of as unused product.

14 Transport Information

14.1 UN-No. ADR/RID: - IMDG: - IATA: 14.2 UN proper shipping name ADR/RID : no dangerous goods IMDG : no dangerous goods IATA : no dangerous goods

- **14.3 Transport hazard class(es)** ADR/RID: - IMDG: - IATA: -
- **14.4 Packaging group** ADR/RID: - IMDG: - IATA: -
- 14.5
 Environmental hazards

 ADR/RID: No
 IMDG: Marine Pollutant:No
 IATA: No

14.6 Special precautions for use No data available

15 Regulatory Information

This safety datasheet complies with the requirements of Regulation(EC) No.1907/2006

15.1 Safety health and environment regulations/legislation specific for the substance or mixture No data available

15.2 Chemical Safety Assessment

No data available

16 Other Information

Further information

Copyright 2010 HiMedia Laboratories Pvt. Ltd. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Himedia Laboratories, shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.