

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

1.1 Product Identifiers

Product Code RM2022 Product Name tert-Butyl hydroperoxide

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] Flammable liquids (Category 3) Self-reactive substances and mixtures; and Organic peroxides (Type C, D) Self-reactive substances and mixtures; and Organic peroxides (Type E, F) Self-reactive substances and mixtures; and Organic peroxides (Type G) Acute toxicity,oral (Category 4) Acute toxicity,dermal (Category 3) Skin corrosion/irritation (Category 1A, B, C) Sensitisation, Skin (Category 1) Acute toxicity,inhalation (Category 3) Germ cell mutagenicity (Category 2) Hazardous to the aquatic environment, long-term hazard (Category 2)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

May cause fire. Flammable. Harmful in contact with skin and if swallowed. Toxic by inhalation. Causes bums. May cause sensitization by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Possible risk of irreversible effects.

2.2 Label elements

Pictogram

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



Signal word

Hazard Statement(s)

- H226 Flammable liquid and vapour
- H242 Heating may cause a fire
- H242 Heating may cause a fire
- H242 Heating may cause a fire

- H302 Harmful if swallowed
- H311 Toxic in contact with skin
- H314 Causes severe skin burns and eye damage
- H317 May cause an allergic skin reaction
- H331 Toxic if inhaled
- Suspected of causing genetic defects H341
- H411 Toxic to aquatic life with long lasting effects

Precautionary Statement(s)

- P220 Keep/Store away from clothing/#/combustible materials.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- Avoid release to the environment. P273
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER or doctor/physician.

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





R-Phrase(s)

K / May cause fire.		
R10	Flammable.	
R21/22	Harmful in contact with skin and if swallowed.	
R23	Toxic by inhalation.	
R34	Causes bums.	
R43	May cause sensitization by skin contact.	
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	
R68	Possible risk of irreversible effects.	
S-Phrase(s)		
C 2 /7		

S3/7	Keep container tightly closed in a cool place.
S14	Keep away from
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 where
	possible).
S47	Keep at temperature not exceeding #.°C.
S61	Avoid release to the environment. Refer to special instructions/Safety data sheets.

2.3 Other hazards - none

3. **Composition/Information on Ingredients**

3.1 **Substances**

Synonym : TBHP

Molecular Formula	(CH $_3$) $_3$ COOH
Molecular Weight.	90.12

Component		Concentration
tert-Butyl hydroperoxide		
CAS-No.	75-91-2	

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
4.3	No data available Indication of immediate medical attention and special treatment needed No data available
5. 5.1	Fire Fighting Measures 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
5.3	Precautions for fire-fighters Wear self contained breathing apparatus for fire fighting if necessary.
5.4	Further information
	No data available
6 6.1	Accidental Release Measures 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 7.1	Handling and Storage 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.
7.3	Recommended Storage Temperature : Store below 30°C Specific end uses No data available
0	

Exposure Controls/Personal Protection 8

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

A	
Appearance	Colourless to yellow liquid
Odour	No data available
Odour Threshold	No data available
Odour Threshold	No data available
рН	No data available
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	No data available
Partition coefficient: n-octanol/Water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	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

Toxicological Information 11 **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 orequal 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 Ecological Information

- 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 14.1	Transport Information UN-No.			
	ADR/RID: 3109	IMDG: 3109	IATA: 3109	
14.2	UN proper shipping name			
	ADR/RID :	tert-Butyl hydro	peroxide	
	IMDG :	tert-Butyl hydro	peroxide	
	IATA :	tert-Butyl hydro	peroxide	
14.3	4.3 Transport hazard class(es)			
	ADR/RID: 5.2 II		TA: 5.2	
14.4 Packaging group				
	ADR/RID: IMD	G: IATA:		
14.5	5 Environmental hazards			
	ADR/RID: No II	MDG: Marine Pol	llutant: 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.