# TERT-BUTYL HYDROPEROXIDE 70% IN WATER EXTRA PURE MSDS

CAS No: MSDS



# **MATERIAL SAFETY DATA SHEET (MSDS)**

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

#### 1.1. Product identifier

Product form : Mixture

:

Product code : 2385K

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

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries

1st Floor, Above Bank of India, Guru Vihar, Rahon Road,

Ludhiana Pb. (141007)

+91 9316777775, +91 7707855700

sales@labogens.com - www.Labogens.com

#### 1.4. Emergency telephone number

Emergency number : +91 7707855700 (9:00am - 6:00 pm)

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, H226 Category 3 Self-Reactive Substances H242 and Mixtures, Type C Acute toxicity (oral), H302 Category 4 Acute toxicity (dermal), H311 Category 3 Acute toxicity (inhal.), H331 Category 3 Skin corrosion/irritation, H314 Category 1 Sensitisation — Skin, H317 category 1 Germ cell mutagenicity, H341 Category 2 Hazardous to the aquatic H411 environment — Chronic Hazard, Category 2

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Full text of classification categories and H statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

Hazard pictograms (CLP)











GHS02

GHS05

GHS06

GHS08

GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H226 - Flammable liquid and vapour H242 - Heating may cause a fire

H302 - Harmful if swallowed

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

Precautionary statements (CLP) : P220 - Keep/Store away from clothing/.../combustible materials

P261 - Avoid breathing vapours, dust, fume, gas P273 - Avoid release to the environment

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

#### 2.3. Other hazards

No additional information available

### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
tert-Butyl hydroperoxide solution	(CAS No) 75-91-2	70	Acute Tox. 3 (Inhalation), H331 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302
Water	(CAS No) 7732-18-5 (EC no) 231-791-2	25 - 35	Not classified

Full text of H-phrases: see section 16

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep

at rest in a position comfortable for breathing.

First-aid measures after skin contact : Immediately call a POISON CENTER or doctor/physician. Wash with plenty of soap

and water. Wash contaminated clothing before reuse.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/injuries : Causes severe skin burns and eye damage.

Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing

significant health hazard. Harmful in contact with skin.

Symptoms/injuries after ingestion : 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

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

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

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

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

Explosion hazard : Heating may cause a fire or explosion.

# 5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory

protection.

#### SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

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#### 6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Toxic to aquatic life with long lasting effects.

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

Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers.

#### 6.4. Reference to other sections

No additional information available

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling

: Avoid contact with skin and eyes. Do not breathe vapours.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed

areas with mild soap and water before eating, drinking or smoking and when leaving

work

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

Storage conditions : Store in a well-ventilated place. Keep container tightly closed.

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

No additional information available

# **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

Hand protection : Protective gloves

Eye protection : Chemical goggles or safety glasses
Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear respiratory protection

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Colourless.

Odour : No data available

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

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Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Solubility : No data available

Log Pow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

#### 9.2. Other information

No additional information available

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Direct sunlight. Overheating. Open flame. Heat. Sparks.

#### 10.5. Incompatible materials

No additional information available

# 10.6. Hazardous decomposition products

No additional information available

#### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Toxic in contact with skin. Inhalation: Toxic if

inhaled.

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ATE CLP (oral)	500 mg/kg bodyweight
ATE CLP (dermal)	300 mg/kg bodyweight
ATE CLP (gases)	700 ppmv/4h
ATE CLP (vapours)	3 mg/l/4h
ATE CLP (dust,mist)	0.5 mg/l/4h

Skin corrosion/irritation : Causes severe skin burns and eye damage.
Serious eye damage/irritation : Serious eye damage, category 1, implicit
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Suspected of causing genetic defects.

Carcinogenicity : Not classified

Reproductive toxicity : Not classified Specific target organ toxicity (single : Not classified

exposure)

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Potential adverse human health effects : Harmfu

and symptoms

: Harmful if swallowed. Harmful in contact with skin.

#### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

No additional information available

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#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Product/Packaging disposal : Dispose of contents/container to ...

recommendations

#### **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

 UN-No. (ADR)
 : 3109

 UN-No. (IMDG)
 : 3109

 UN-No.(IATA)
 : 3109

 UN-No.(ADN)
 : 3109

 UN-No. (RID)
 : 3109

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR)

Proper Shipping Name (IMDG)

Proper Shipping Name (IMTA)

Proper Shipping Name (IATA)

Proper Shipping Name (ADN)

Proper Shipping Name (ADN)

Proper Shipping Name (RID)

Proper Shipping Name (RID)

CORGANIC PEROXIDE TYPE F, LIQUID

CORGANIC PEROXIDE TYPE F, LIQUID

Transport document description (ADR) : UN 3109 ORGANIC PEROXIDE TYPE F, LIQUID, 5.2, (D), ENVIRONMENTALLY

**HAZARDOUS** 

Transport document description (IMDG) : UN 3109 ORGANIC PEROXIDE TYPE F, LIQUID, 5.2, MARINE

POLLUTANT/ENVIRONMENTALLY HAZARDOUS

Transport document description (IATA) : UN 3109 ORGANIC PEROXIDE TYPE F, LIQUID, 5.2, ENVIRONMENTALLY

HAZARDOUS

Transport document description (ADN) : UN 3109 ORGANIC PEROXIDE TYPE F, LIQUID, 5.2, ENVIRONMENTALLY

**HAZARDOUS** 

Transport document description (RID) : UN 3109 ORGANIC PEROXIDE TYPE F, LIQUID, 5.2, ENVIRONMENTALLY

**HAZARDOUS** 

#### 14.3. Transport hazard class(es)

#### **ADR**

Transport hazard class(es) (ADR) : 5.2 Danger labels (ADR) : 5.2



#### **IMDG**

Transport hazard class(es) (IMDG) : 5.2
Danger labels (IMDG) : 5.2



#### **IATA**

Transport hazard class(es) (IATA) : 5.2

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Hazard labels (IATA) : 5.2



#### ADN

Transport hazard class(es) (ADN) : 5.2 Danger labels (ADN) : 5.2



#### RID

Transport hazard class(es) (RID) : 5.2 Danger labels (RID) : 5.2



#### 14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

#### 14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes

Other information : No supplementary information available

# 14.6. Special precautions for user

# - Overland transport

Classification code (ADR) : P1
Special provision (ADR) : 122, 274
Limited quantities (ADR) : 125ml
Excepted quantities (ADR) : E0

Packing instructions (ADR) : P520, IBC520

Mixed packing provisions (ADR) : MP4
Portable tank and bulk container : T23

instructions (ADR)

Tank code (ADR) : L4BN(+)

Tank special provisions (ADR) : TU3, TU13, TU30, TE12, TA2, TM4

Vehicle for tank carriage : AT Transport category (ADR) : 2

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Special provisions for carriage - Packages : V1

(ADR)

Special provisions for carriage - Loading,

unloading and handling (ADR)

: CV15, CV22, CV24

Hazard identification number (Kemler No.) : 539

Orange plates

539 3109

Tunnel restriction code (ADR) : D
EAC code : 2W

#### - Transport by sea

Special provision (IMDG) : 122, 274 : 125 ml Limited quantities (IMDG) : E0 Excepted quantities (IMDG) Packing instructions (IMDG) : P520 IBC packing instructions (IMDG) : IBC520 Tank instructions (IMDG) : T23 EmS-No. (Fire) : F-J : S-R EmS-No. (Spillage) Stowage category (IMDG) : D Stowage and handling (IMDG) : SW1

Segregation (IMDG) : SG35, SG36, SG72

#### - Air transport

PCA Excepted quantities (IATA) : E0

PCA Limited quantities (IATA) : Forbidden
PCA limited quantity max net quantity : Forbidden

(IATA)

PCA packing instructions (IATA) : 570
PCA max net quantity (IATA) : 10L
CAO packing instructions (IATA) : 570
CAO max net quantity (IATA) : 25L

Special provision (IATA) : A20, A150

ERG code (IATA) : 5L

#### - Inland waterway transport

Classification code (ADN) : P1

Special provisions (ADN) : 122, 274

Limited quantities (ADN) : 125 ml

Excepted quantities (ADN) : E0

Equipment required (ADN) : PP, EX, A

Ventilation (ADN) : VE01

Number of blue cones/lights (ADN) : 0

#### - Rail transport

Classification code (RID) : P1
Special provision (RID) : 122, 274
Limited quantities (RID) : 125ml
Excepted quantities (RID) : E0

Packing instructions (RID) : P520, IBC520

Mixed packing provisions (RID) : MP4
Portable tank and bulk container : T23

instructions (RID)

Tank codes for RID tanks (RID) : L4BN(+)

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Special provisions for RID tanks (RID) : TU3, TU13, TU30, TE12, TA2, TM4

Transport category (RID) : 2 Special provisions for carriage – Packages : W7

(RID)

Special provisions for carriage – Loading : CW22, CW24, CW29

and unloading (RID)

Colis express (express parcels) (RID) : CE6
Hazard identification number (RID) : 539

### 14.7. 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

#### 15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

#### 15.1.2. National regulations

#### Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to water (Classification according

to AwSV, Annex 1)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

#### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct

contact with the product

The requirements from the Danish Working Environment Authorities regarding work

with carcinogens must be followed during use and disposal

# 15.2. Chemical safety assessment

No additional information available

#### **SECTION 16: Other information**

### Full text of H- and EUH-phrases:

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Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Muta. 2	Germ cell mutagenicity, Category 2
Self-react. C	Self-Reactive Substances and Mixtures, Type C
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Sens. 1	Sensitisation — Skin, category 1
H226	Flammable liquid and vapour
H242	Heating may cause a fire
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H331	Toxic if inhaled
H341	Suspected of causing genetic defects
H411	Toxic to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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