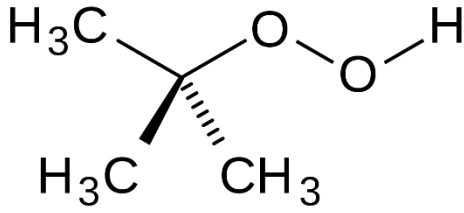

TERT-BUTYL HYDROPEROXIDE**IUPAC NAME:** 2-hydroperoxy-2-methylpropane**CHEMICAL FORMULA:** C₄H₁₀O₂**CAS NO:** 75-91-2**MOLECULAR WEIGHT:** 90.12 g/mol**PACKING:**

PRODUCT DESCRIPTION:

Tert-Butyl Hydroperoxide (TBHP) is primarily used as a radical initiator in various chemical reactions, especially in polymerization processes. It serves as a source of free radicals, which initiate chain reactions in polymerization reactions, leading to the formation of polymers and copolymers. TBHP is widely employed in the production of plastics, coatings, adhesives, and other polymer-based products.

APPLICATION AREAS:

Tert-Butyl Hydroperoxide is used as an oxidation and sulfonation catalyst, and in bleaching and deodorizing.

IT IS APPLIED IN THE PRODUCTION OF:

- Polymer Industry
- Chemical Synthesis
- Environmental Remediation
- Pharmaceutical Industry
- Green Chemistry
- Energy Storage
- Initiators in Chemical Reactions

CHEMICAL PROPERTIES


PURITY	68-71%
ACID CONTENT	
MOISTURE AMOUNT	
COLOUR (APHA)	
INHIBITOR	

PHYSICAL PROPERTIES

APPEARANCE	Colourless
PHYSICAL STATE	Liquid
ODOR	Pungent
DENSITY	0.94 g/cm ³ (20 °C)
BOILING POINT	37 °C
FREEZING POINT	-3 °C
FLASH POINT	43°C
VISCOSITY	4 mPas at 20°C
VAPOR PRESSURE	31 hPa



SAFETY INFORMATION

HAZARD PICTOGRAM(S)	
HAZARD STATEMENT(S)	<p>H226: Flammable liquid and vapour.</p> <p>H242: Heating may cause a fire.</p> <p>H302: Harmful if swallowed.</p> <p>H311: Toxic in contact with skin.</p> <p>H314: Causes severe skin burns and eye damage.</p> <p>H317: May cause an allergic skin reaction.</p> <p>H330: Fatal if inhaled.</p> <p>H335: May cause respiratory irritation.</p> <p>H341: Suspected of causing genetic defects.</p> <p>H411: Toxic to aquatic life with long lasting effects.</p> <p>EUH044: Risk of explosion if heated under confinement.</p>
RISK PHRASES	<p>R 7 May cause fire.</p> <p>R 10 Flammable.</p> <p>R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed</p> <p>R 34 Causes burns</p> <p>R 41 Risk of serious damage to eyes.</p> <p>R 43 May cause sensitisation by skin contact.</p> <p>R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p>

SAFETY PHRASES	<p>S3/7 Keep the container tightly closed in a cool place.</p> <p>S14 Keep away from dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy metal compounds and amines).</p> <p>S24/25 Avoid contact with skin and eyes.</p> <p>S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.</p> <p>S45 In case of an accident or if you feel unwell, seek medical advice immediately (show the label where possible).</p> <p>S50 Do not mix with peroxide-accelerators or reducing agents.</p> <p>S60 This material and its container must be disposed of as hazardous waste.</p> <p>S61 Avoid release to the environment. Refer to special instructions/safety data sheets.</p>
PRECAUTIONARY STATEMENT(S)	<p>P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P280: Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.</p> <p>P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.</p> <p>P304 + P340 + P310: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.</p> <p>P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.</p>
STORAGE CLASS	<p>Storage class: 5.2 "Organische Peroxide" (VCI-Konzept)</p>
STORAGE CONDITIONS	<p>Requirements to be met by storerooms and receptacles: Store in a cool location. Store only in the original receptacle. Prevent any seepage into the ground. Use only receptacles specifically permitted for this substance/product.</p> <p>Information about storage in one common storage facility: Do not store or park organic peroxide together with heavy metal compounds and amines. Store away from foodstuffs, drinks and feeding stuff.</p> <p>Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well-sealed receptacles. Protect from heat and direct sunlight. Protect from contamination. Store under lock and key and out of the reach of children. Store in a cool place.</p> <p>Recommended storage temperature: +5 +30°C</p>

DISPOSAL	<p>Product Recommendation: After diluting with a suitable destination agent to 10 %, the solution must be supplied to a special treatment (e. g. thermal utilization) under observance of all official regulations. Must not be disposed together with household garbage. Do not allow product to reach sewage system.</p> <p>Uncleaned packaging: Recommendation: This material and its container must be disposed of as hazardous waste.</p>
TRANSPORT INFORMATION	<p>Land transport ADR/RID (cross-border):</p> <ul style="list-style-type: none">● ADR/RID class :5.2 (P1) Organic peroxides.● Danger code (Kemler) :539● UN-Number :3109● Hazard label :5.2+8● Description of goods :3109 ORGANIC PEROXIDE TYPE F, LIQUID (tert-butyl hydroperoxide)● RID / GGVSE: like ADR <p>Maritime transport IMDG:</p> <ul style="list-style-type: none">● IMDG Class :5.2● UN Number :3109● Label :5.2+8● Marine pollutant: No● Proper shipping name: ORGANIC PEROXIDE TYPE F, LIQUID (tert-butyl hydroperoxide) <p>Air transport ICAO-TI and IATA-DGR:</p> <ul style="list-style-type: none">● ICAO/IATA Class :5.2● UN/ID Number :3109● Label :5.2+8● Proper shipping name: ORGANIC PEROXIDE TYPE F, LIQUID (tert-butyl hydroperoxide)
For more information, check the SAFETY DATA SHEET or get contact with us.	