

NOROX[®] TBHP

Tertiary-Butyl Hydroperoxide

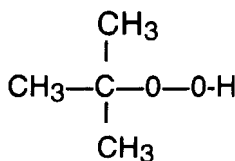
DESCRIPTION

Norox[®] TBHP is a 70 percent solution of t-butyl peroxide in water. As a tertiary alkyl hydroperoxide, Norox[®] TBHP is a convenient source of free radicals for the polymerization of vinyl monomers when the presence of water can be tolerated.

TYPICAL PROPERTIES

t-butyl Hydroperoxide	70 %
Active Oxygen	12.4 %
Form	Liquid
Color	Water White
Specific Gravity @ 25°C/4°C	0.93
Flash Point (C.O.C.)	150°F / 41°C
Insoluble In	Hydrocarbons
Slightly soluble in	Water, ethers, esters
Soluble In	Alcohols, acetone, methyl ethyl ketone

CHEMICAL STRUCTURE



Molecular Weight — 90.1
 Empirical Formula — C₄H₁₀O₂

THERMAL DECOMPOSITION DATA (Half-Life in Benzene)

Temperature	165°C	193°C	224°C
Time	10 hrs.	1 hr.	1 min.

APPLICATIONS

Norox[®] TBHP is an efficient initiator for the emulsion polymerization of many vinyl monomers, including styrene and methyl methacrylate. The free radicals can be generated through a redox mechanism with various metallic salts of cobalt and iron to initiate polymerization.

NOROX[®] TBHP

STORAGE

- Storage at 80°F or below is recommended.
- Store in original containers **away** from flammables and all sources of heat, sparks, or flames; out of direct sunlight; and **away** from **cobalt naphthenate**, other promoters, accelerators, oxidizing or reducing agents and strong acids or bases.
- **Leaking containers** – Remove and isolate in a safe area. Re-package or dispose immediately (see **spills**).
- **Never** store in refrigerators containing food and/or beverages.
- Consult National Fire Protection Association (NFPA) Code 432 and/or local regulatory agencies.
- Rotate stock, use oldest date first.

HANDLING

- Inform all personnel of procedures for safe handling and review MSDS with them.
- Remove from storage area only the amount needed for one shift.
- Wear safety glasses or goggles and chemical resistant gloves.
- Keep away from heat, flames, and sparks.
- Avoid breathing vapors.
- Respirators should be worn when using spray system.
- **Never** add peroxides directly to promoters or vice-versa, violent decomposition can occur.

FIRST AID

- EYES – Flush immediately with large amounts of fresh water and continue washing for at least 15 minutes. **Medical attention is needed.**
- SKIN – Wash with soap and water.
- INGESTION – Administer large amounts of milk or water and call a physician immediately. Do not induce vomiting. As an aid to the physician, suggest calling your local Poison Control Center.

SPILLS

- Clean up immediately by absorbing with inert non-acidic material – vermiculite or sand.
- After absorbing, moderately wet immediately with water and place in a clean plastic bag inside a plastic pail.
- Dispose of immediately in accordance with local, state, and federal regulations.
NOTE: Spilled peroxides, if not immediately cleaned up, can become contaminated and ignite or decompose in a hazardous, violent manner.

FIRE

- Peroxides ignite readily and burn vigorously with acceleration.
- Use water from a safe distance – preferably with a water-fog nozzle.
- For very small fires, an extinguisher with carbon dioxide, foam, or dry chemical may be effective.
- In case of fire in or near a storage area, cool stored containers with water spray.

PACKAGING, SHIPPING & AVAILABILITY

- The standard package sizes of Norox[®] TBHP are 4 x 7 lb or 4 x 3.4 kg polyethylene bottles; and 35 lb or 18 kg Hedpacks. For custom package sizes, please contact your local distributor on Syrgis Performance Initiators, Inc.
- Classification – Please refer to the specific Norox[®] TBHP Material Safety Data Sheet under section 14, Shipping Description.
- Norox[®] TBHP is available through a nation-wide distributor network. Call Syrgis Performance Initiators, Inc. for the name of the distributor in your area.

NOTE: MSDS's for all our products may be requested thru the website www.syrgisperformanceinitiators.com

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