

## NOROX<sup>®</sup> 411-75OMS

### t-Amylperoxy-2-Ethylhexanoate (t-Amyl Peroctoate) 75% in Odorless Mineral Spirits

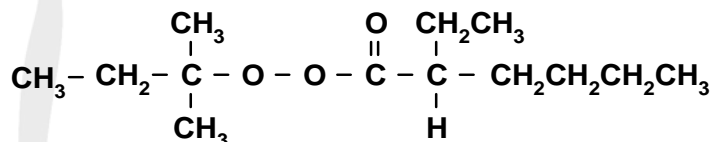
#### DESCRIPTION

Norox<sup>®</sup> 411-75OMS is a 75% solution of peroxyester in odorless mineral spirits, useful as an initiator in the polymerization of vinyl monomers.

#### TYPICAL PROPERTIES

t-Amylperoxy-2-ethylhexanoate.....	75%
Active Oxygen .....	5.2%
t-Amyl Hydroperoxide .....	0.10% max.
Form .....	Colorless Liquid
Specific Gravity @ 25°/4°C .....	0.857
Refractive Index @ 25°C .....	1.429
Flash Point (SETA C.C.) .....	58°C / 137°F
Insoluble in .....	Water
Soluble in .....	Common Organic Solvents

#### CHEMICAL STRUCTURE



Molecular Weight 230.3  
 Empirical Formula – C<sub>13</sub>H<sub>26</sub>O<sub>3</sub>  
 CAS No. 686-31-7

#### THERMAL DECOMPOSITION DATA (Half-Life 0.2 mole/liter in Benzene)

Temperature	62°C / 144°F	79°C / 174°F	97°C / 207°F
Time	10 hrs.	1 hr.	0.1 hr.

#### APPLICATION

Norox<sup>®</sup> 411-75OMS is an excellent free radical source for the polymerization of vinyl monomers and unsaturated polyester resins.

In vinyl polymerizations, polymers initiated by t-Amyl peroctoate, 75% in odorless mineral spirits (OMS) show better optical clarity and weathering characteristics.

In unsaturated polyester formulations, t-Amyl peroctoate, 75% in odorless mineral spirits offers faster cure times than its t-Butyl analog without sacrificing catalyzed shelf life. Reduced residual monomer levels in the cured polyester have been reported when t-Amyl peroxides are used.

Norox<sup>®</sup> 411-75OMS is the initiator of choice in high solids acrylic resins for coatings applications. Norox<sup>®</sup> 411-75OMS decomposes to produce radicals that are poor hydrogen abstractors, giving resins with narrow molecular weight distributions and lower viscosities.

# NOROX<sup>®</sup> 411-75OMS

## STORAGE

- Storage at 50°F (10°C) 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

- Norox<sup>®</sup> 411-75OMS is a combustible oxidizing liquid, which must be handled with care.
- Inform all personnel of procedures for safe handling and review MSDS with them.
- Remove from storage area only the amount needed for immediate usage.
- Wear safety glasses or goggles and chemical resistant gloves.
- Keep away from heat, flames, and sparks.
- Avoid breathing vapors.
- **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

- Soak spilled material with water. The addition of water will reduce the concentration of the peroxide and will reduce its hazard potential.
- 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<sup>®</sup> 411-75OMS are 30 lb. (5 gallon) polyethylene containers or 4 x 1 gallon (7 lb.) polyethylene containers per carton.
- Classification – Please refer to the specific Norox<sup>®</sup> 411-75OMS Material Safety Data Sheet under section 14, Shipping Description.
- Norox<sup>®</sup> 411-75OMS 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](http://www.syrgisperformanceinitiators.com)

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