



A joint venture between



## THAI PEROXIDE CO., LTD

(Joint venture of PeroxyChem, USA and Aditya Birla Group.)

OFFICE: 77 Moo 6 Soi Sukhaphiban 1 Poochaosamingprai Rd., Samrong, Phapradaeng, Samutprakarn 10130, THAILAND. Phones: (66 2) 7042100, 7484970 Fax: (66 2) 3985510, Email: [customerservices.thaichemicals@adityabirla.com](mailto:customerservices.thaichemicals@adityabirla.com)

### PRODUCT INFORMATION.

## 50% Hydrogen Peroxide Herlisil-500 Grade

**Description** : A water like clear & colorless liquid.  
**Formula** :  $H_2O_2$   
**CAS NO.** : 7722-84-1  
**Synonyms** : Peroxide, Dihydrogen dioxide  
**Molecular weight** : 34.016 g/mole

### Physical and Chemical properties:

Active oxygen content	23.5	% wt
Freezing point	-52	°C
Boiling point	114	°C
Vapor pressure @ 86 °C	18	mm Hg
Viscosity		
@ 32 °C	1.87	cp
@ 68 °C	1.17	cp
Heat of decomposition	335	cal/gm
Mole fraction	0.346	

### Specification

CHARACTERISTICS	UNIT	SPECIFICATION	TEST METHOD
Hydrogen Peroxide	% w/w	50.0 min	TPL QCWK-1001
Stability @ 96 °C , 3 hrs	%	99.6 min	TPL QCWK-1012
pH	-	1.6 max	TPL QCWK-1002
Sp.Gravity @25 ±1° C	-	1.19 min	TPL QCWK-1009
Appearance	-	Clear	TPL QCWK-1008
Color	H.U	15 max	TPL QCWK-1008
Silver	ppm	500 min	TPL QCWK-1028



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### Product performance

Best if used within 12 months and stored at 35°C maximum.

### Applications

- Sea-food, fruits , vegetable packaging : Prevents fish gill decomposition / Surface disinfection of equipment / Yeast washing.
- Beverage industry and breweries : Bottle washer / pipeline disinfection / surface disinfection.
- Poultry Farm: Disinfection of chicken coop and drinking water tanks / pipes to minimize the risk of infection to live stock.

### Test Method

Determination of the active oxygen content and concentration by titration with potassium permanganate.

### Handling & Storage

Wear safety goggles and gloves. Protect Herlisil from heat and any contamination. Especially, contamination with heavy metal will catalyze the decomposition of H<sub>2</sub>O<sub>2</sub>. H<sub>2</sub>O<sub>2</sub> solutions are nonflammable but can ignite flammable material . H<sub>2</sub>O<sub>2</sub> should be stored in the original containers or in specially designed tanks. Thai Peroxide engineering group is able to assist you with design and installation.

### Packaging

- : 5 kg. HDPE Drum
- : 30 kg. HDPE Drum

### Hazards

- Herlisil depending on the concentration .is classified as irritating and corrosive or as corrosive and oxidizing. Although H<sub>2</sub>O<sub>2</sub> solutions are not flammable. Concentrate H<sub>2</sub>O<sub>2</sub> can ignite flammable materials. Improper handling may result in rapid decomposition.
- For labeling, transport regulations, first aid and toxicology information, refer to material safety data sheet.

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Prepared by: QC Dept.

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