



## Hydrogen Peroxide - Super D® Grade

CAS NO 7722-84-1

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### Introduction

Super D® hydrogen peroxide is specially stabilized for those customers who prepare dilute H<sub>2</sub>O<sub>2</sub> solutions requiring a long shelf life. When diluted to 3% concentration with high quality de-ionized water, the diluted product will meet U.S. Pharmacopoeia specifications for topical solution. This product also is excellent for preparation of home laundry bleach formulations. Any materials used in the preparation of cosmetic creams or emulsions or laundry bleaches should be tested for compatibility with hydrogen peroxide.

\*Note: While manufactured to USP standards for purity and to our demanding quality standards, FMC does not claim that its Hydrogen Peroxide is manufactured under cGMP conditions.

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### Specifications

	<b>35%</b>	<b>50%</b>	<b>70%</b>
H <sub>2</sub> O <sub>2</sub> content, % by weight			
Product diluted at FMC sites	35.0-35.8	50.0-50.8	65.0-65.8
Stability, 24 hours @ 100° C	>97.0%	>97.0%	>97.0%

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### Typical Properties

	<b>35%</b>	<b>50%</b>	<b>70%</b>
Loss in % assay, 1 yr, 25° C	<0.7	<1.0	<1.3
Apparent pH	2.7-3.3	2.7-3.3 @ 35%	2.7-3.3 @ 35%
Active oxygen content, %	16.5	23.5	30.6
Specific gravity (20° C/4° C)	1.13	1.20	1.25

**FMC Corporation**

Hydrogen Peroxide Division

1735 Market Street

Philadelphia, PA 19103

Phone: 1-800-442-6236

URL at <http://www.fmcchemicals.com>

Lbs/gal (kg/M <sup>3</sup> or g/L) @ 20° C	9.4 (1126)	10.0 (1198)	10.5 (1258)
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**Typical Properties****35%****50%****70%**

Boiling point, ° C (° F)	108 (226)	114 (237)	122 (259)
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Freezing point, ° C	-33 (-27)	-52 (-62)	-49 (-56)
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Residue on evaporation, % by weight	0.25	0.35	0.45
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**Standard Containers**

Polyethylene drums: 15 gallon (56.8 liter), 30 gallon (113.6 liter), 55 gallon (208.2 liter).

Bulk shipments are available in tank trucks and tank cars.

Hydrogen peroxide above 8% concentration is classified as an "Oxidizer" by the Department of Transportation and all containers must carry the yellow DOT label.

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**Safety and Handling**

Hydrogen peroxide is a very reactive chemical and must be handled carefully. It should be stored in the original containers until ready to use, and any material removed from the original container must not be returned to it. Personnel should wear rubber gloves, eye and face protection, and suitable protective clothing when handling this chemical. Utensils used for handling hydrogen peroxide must be of compatible materials like glass, stainless steel, aluminum or plastic. Hydrogen peroxide must not be placed in a closed, unvented container.

Any spilled hydrogen peroxide should be immediately flooded with water and washed away with large quantities of water.

Although neither hydrogen peroxide nor its decomposition products – oxygen and water – are systemi poisons, concentrated solutions irritate the skin, particularly mucous membrane tissue, and the eyes. If the chemical comes in contact with the skin, it should be immediately washed off thoroughly with generous quantities of water. If it contacts the eyes, flush thoroughly and consult and physician promptly. If swallowed, drink lots of water but do not encourage vomiting. Call a physician immediately.

Clothing must be washed thoroughly with water should it come in contact with hydrogen peroxide. If allowed to dry in the fabric, the chemical may cause fire, particularly if the clothing is soiled.

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### **Production and Distribution**

FMC hydrogen peroxide is produced at three plants in the US and Canada with locations in Spring Hill, WV; Bayport, TX; and Prince George, BC. FMC maintains 16 distributions centers in the US and Canada with deliveries by a team of driver technicians to assure reliable on-time delivery to customer locations. An international producer of H<sub>2</sub>O<sub>2</sub>, FMC also has a plant in Mexico, and affiliated plants in Spain, Thailand, and Holland.

### **Customer Service**

To place orders, request samples or obtain general information, please call the marketing office below.

**FMC Corporation**  
**Peroxygen Chemical Division, Marketing**  
**1735 Market Street**  
**Philadelphia, PA 19103**  
**Tel: (215) 299-6000**

For technical assistance, please call one of the offices below:

#### **Applications and Chemistry of Peroxygen**

FMC Research and Development Center  
Peroxygen Chemicals Division  
Princeton, NJ 08543  
Tel: (609) 951-3000

#### **Systems for Storage and Handling**

FMC Technical Services and Engineering  
Tonawanda, NY 14240  
Tel: (716) 879-0427

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### **Notice**

The information contained herein is, to our knowledge, true, and accurate. However, we make no warranty or representation, expressed or implied, expect that FMC products discussed herein conform to the chemical description shown on their labels. Nothing contained herein shall be construed as permission or recommendation to infringe any patent. No agent, representative or employee of this company is authorized to vary any of the terms of this notice.