

Hydrogen Peroxide - OxyPure™ Grade

CAS NO 7722-84-1

Introduction

OxyPure™ hydrogen peroxide is the NSF approved product for drinking water applications. It is certified for use in drinking water by the National Sanitation Foundation under NSF/ANSI Standard 60 Drinking Water Additives-Health Effects. OxyPure™ is used for removal of iron or hydrogen sulfide in ground water and both for enhancing the taste/odor removal efficiency of ozone and for destroying ozone and chlorine residuals in potable water treatment. OxyPure™ 50% may be used for sulfide control and in conjunction with ozone for organic control at use level of 60 PPM when followed by chlorination of the treated water. OxyPure™ 35% may be used for sulfide control and in conjunction with ozone for organic control at use level of 85 PPM when followed by chlorination of the treated water.

Specifications

	35%	50%
H ₂ O ₂ content, % by weight		
Product diluted at FMC sites	35.0-35.8	50.0-50.8
Stability, 24 hours @ 100° C	³ 96.0%	³ 96.0%

Typical Properties

Approximate Value

	35%	50%
Apparent pH	3.5-4.0	1.1-1.6
Residue, ppm	<10	<20
Loss in % assay, 1 yr, 25° C	<0.7	<1.0
Arsenic (ICP), ppm	<0.001	<0.002

Lead (ICP), ppm	<0.001	<0.002
Iron (ICP), ppm	<0.03	<0.05
Active oxygen, % by weight	16.5	23.5%
Specific gravity @ 20° C	1.13	1.20
H ₂ O ₂ gram per liter @ 20° C	396	600
Lbs/U.S. gal (kg/M ³) @ 20° C	9.4 (1126)	10.0 (1198)
Freezing point, ° C	-33 (-27)	-52 (-62)

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.