



Hydrogen Peroxide - Technical Grade

CAS NO 7722-84-1

Introduction

Technical Grade hydrogen peroxide is designed for those customers who need a product essentially free of inorganic metal ions. It does not contain the stannate stabilizer, which can lead to undesirable residues or precipitates in some applications. Technical Grade is frequently used in the synthesis of organic chemicals such as epoxides, organic peroxides, and amine oxides. The 70% concentration is available in bulk form only and it must be diluted with high quality deionized water for bulk storage at 50% or 35% concentration. When handled properly and protected from contamination, it has the same excellent storage stability as FMC Standard Grade hydrogen peroxide.

| | <u>35%</u> | <u>50%</u> | <u>70%</u> |
|--|------------|-------------|-------------|
| <u>Specifications</u> | | | |
| H ₂ O ₂ content, % by weight | | | |
| Product diluted at FMC sites | 35.0-35.8 | 50.0-50.8 | 70.0-70.8 |
| Stability, 24 hours @ 100° C | >96.0% | >96.0% | >96.0% |
| <u>Typical Properties</u> | | | |
| Loss in % assay, 1 yr, 25° C | <2.0 | <2.0 | <1.4 |
| Apparent pH | 2.0-3.0 | 1.0-2.0 | 0-1.0 |
| Sn, ppm | <0.5 | <0.7 | <1.7 |
| Fe, ppm | <0.02 | <0.03 | <0.04 |
| Cr, ppm | <0.01 | <0.015 | <0.02 |
| Ni, ppm | <0.01 | <0.015 | <0.02 |
| Cu, ppm | <0.005 | <0.007 | <0.01 |
| Active oxygen content, % | 16.5 | 23.5 | 32.9 |
| Specific gravity (20° C) | 1.13 | 1.20 | 1.29 |
| Lbs/gal (kg/M ³ or g/L) @ 20° C | 9.4 (1126) | 10.0 (1198) | 10.8 (1294) |
| Boiling point, ° C (°F) | 108 (226) | 114 (237) | 126 (259) |
| Freezing point, ° C (°F) | -33 (-27) | -52 (-62) | -40 (-40) |

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.