

HYDROGEN PEROXIDE 50%

Last revision 2008

Chemical Name: Molecular formula: H₂O₂
 No. CAS: 7722-84-1
 Abbreviation: Hydrogen Peroxide

General Description:

Hydrogen Peroxide is one of the strongest oxidizers.

Hydrogen Peroxide is a colorless liquid, can be mixed with water in any ratio, is soluble in ether and alcohol. It has a high dielectric coefficient, closer to that of water, and when it doesn't act like an oxidizer, it is a good ionizable solvent against salts.

Being unstable, it decomposes spontaneously in water and oxygen, the rate being affected by some elements as: light, heat, catalysts, etc.

Technical Quality Conditions:

Characteristics	MU	Limits		Test methods
Type	-	50	60	-
Appearance	-	clear liquid		visual
Color	-	colorless		visual
H ₂ O ₂ content, min.	%	50±0,5	60±0,5	ILL-003/3-04-17
Acidity (H ₂ SO ₄), max.	%	0.035	0.025	ILL-003/3-04-19
Stability at 100°C (concentration loss), max.	%	5	5	ILL-003/3-04-18

Specific Properties:

	Type 50	Type 60
pH	1.0-3.0	1.0-3.0
Density at 20°C, g/cm ³	1.19	1.24
Boiling point ⁰ C	114	125
Melting/ freezing point ⁰ C	-52	-56

The values of those characteristics are approximated, and are only for general information and are not part of the technical quality conditions.

Main Applications:

- bleaching agent in textile industry;
- drinking and waste water treatment;
- detergents, pulp and paper industries;
- synthesis in chemical industry;
- metallurgy and mining industry;
- oil refining;
- environmental protection.



Shipping Information:

- AISI 316 L (W1.4571) stainless steel or minimum 99.5% purity aluminum railway or road tankers provided with warning signs, or in polyethylene cans provided with outlet valves.

Storage:

Hydrogen peroxide should be stored only after it has been stabilized in containers provided with venting.

The storage should be done in a cold, well vented area, far from inconsistent substances and heat sources. Storage should be done in glass, aluminum, high density polyethylene, stainless steel 304 L and 316 L containers, provided with cover with valve. Polypropylene is not to be accepted as a material to come in contact with H₂O₂.

Containers used for the storage and transportation of the hydrogen peroxide are only exclusively to be used for this product. Containers filled with hydrogen peroxide in any concentration should not be stored on wooden pallets.

The product should be kept away from contact with organic or mechanic impurities, because they promote decomposition.

Safety Consideration:

Please refer to the product Material Safety Data Sheet (MSDS) offering customers help to better satisfy their particular handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations.

Warning:

Carrier vehicles used for the transportations of canisters should have the floor well wetted.

It is not recommended that you should transport the product with other chemical or flammable products.

Attention:

Information contained in this document is provided to the best of our knowledge and experience.

Please contact OLTCHIM to see if the document has been revised.

Important:

For a better suitability of the product for your particular purpose, tests are recommended prior product use. You are advised to make your own determination as to safety, appropriate manner of handling, storage, use and disposal. All the information contained in this product technical sheet is offered for your consideration, investigation and verification. The data is presented in good faith and is believed to be reliable. You should not consider the descriptions, information, data or design as a part of our terms and conditions of sale. We expressly disclaim responsibility or liability for any loss, damage or expense arising out of reliance on the information provided herein.