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## Technical Data Sheet

# Sodium Borohydride 12% Solution

### Product Information

Chemical Name	Sodium borohydride
CAS #	16940-66-2
EINECS	241-004-4
Formula	BH <sub>4</sub> Na
Molecular Weight	37.83
Synonyms	Sodium tetrahydroborate, NaBH <sub>4</sub>
Chemical structure	



### Description

Sodium Borohydride 12% solution is a stabilized water solution containing 12% sodium borohydride. It contains minimum 20% of NaOH which can assure its storage ability.

### Physical Properties

Color	Colorless transparent liquid
Solubility	can be soluble with water
Viscosity @20°C	60.4 mPa.s
Density,@25 °C	1.4
Stability	≤0.01% decomposition per year

## Specification

<u>Item</u>	<u>Specifications</u>
Appearance	Colorless clear solution
Characters	Visible particles(1g≤1 particle), No black particles
Assay (GC),%	≥12.0

## Applications

- In pharmaceuticals industry, especially as a reducing agent on Antibiotic,etc.
- Paper manufacturing industry, especially to make newspaper avoid becoming yellow,etc.
- As plastic vesicant in plastic industry,then in leather industry and textile industry,etc.
- Be used in waste water treatment to remove heavy metal.

## Recommended Use

Sodium borohydride 12% solution contains 12% sodium borohydride by weight. Under ideal reaction conditions, one mole (37.8g) of NaBH<sub>4</sub> can reduce four moles of an aldehyde or ketone to the corresponding alcohol:



Thus 1.8kg Sodium borohydride 12% solution can theoretically reduce 1kg of acetaldehyde to ethanol. One of the most important parameters in the efficient use of Sodium borohydride solution is PH control: reductions should be carried out at a PH of 10 or higher. If the PH below 10, the solution efficiency may decrease.

## Packing

250 kg plastic drum, total 80 drums, 20,000kg per 20ft container.

## Storage & Handling

Unstable. Keep container dry. Keep container tightly closed, in a cool, well-ventilated area. Keep away from extreme heat and oxidizing agents.

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on handling and disposal.

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