

Product Information Bulletin

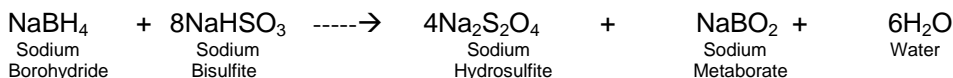
MontTex 1240[®]

Sodium Borohydride Solution

MontTex 1240 is a stable aqueous solution of sodium borohydride (NaBH₄) and caustic soda (sodium hydroxide, NaOH), used by the textile industry in the on-site generation of sodium hydrosulfite (Na₂S₂O₄) bleach for the reduction of vat dyes, stripping and clearing. The all liquid system, automatically produces bleach solution on demand, provides the user with a readily available source of fresh bleach solution containing minimal quantities of corrosive decomposition products.

Sodium Hydrosulfite Production

Sodium hydrosulfite is produced by the continuous reduction of sodium bi-sulfite with sodium borohydride, based on the following reaction:



The sodium bi-sulfite required for the process can be obtained from outside merchant sources as a sodium meta bi-sulfite 99% powder or as a 38% aqueous solution..

The optimum chemical ratio is one part MontTex 1240 to 3.7 parts of sodium meta bi-sulfite powder or 11 parts of 38% sodium bi-sulfite solution. The two components may be mixed in a well ventilated mix tank with a suggested 1:10 ratio with water. A small quantity of hydrogen is liberated during the reaction. The bleach solution may be stored or used on demand to replace sodium hydrosulfite in any textile dyeing or stripping application.

All materials used in the bleach generation process are stable liquids, delivered in bulk, therefore operator attention to the process and the hazards of handling merchant bleach powder are minimized.

Physical Properties

Sodium borohydride		12±0.2%
Sodium hydroxide		40±2.0%
Freezing point		13°C (55°F)
pH		14.0+
Density	@23°C	1.4gm/cc
	@73°F	11.7lbs/gal

Storage and Handling

MontTex 1240 solution is extremely stable, undergoing minimal decomposition during long term storage, and should be stored and handled following standard procedures for caustic soda (sodium hydroxide) solution. Contact with Aluminum and other materials which react with sodium hydroxide solutions should be prevented. Contact with acids or acidic materials should be avoided. Ventilate spill areas and flush with large quantities of water, per Material Safety Data Sheet instructions.

Shipping Information

MontTex 1240 is available for bulk shipment in 4,000 gallon tank trucks, and in 275 gal. (3,200 pound) tote bins and 55 gallon plastic drums. Other packaging is also available to meet specific customer requirements.

Technical Assistance

On-site customer technical support and assistance for all aspects of **MontTex 1240** usage and handling, including product transport and storage, bleach generation unit design, fabrication, startup, calibration, and service, and economic analysis is available to all **MontTex 1240** customers. Plants presently using merchant hydrosulfite liquid or powder, or sodium borohydride for bleach generation, are encouraged to contact Montgomery Chemicals, LLC to discuss full scale plant trials of **MontTex 1240**.

Montgomery Chemicals, LLC

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Contact Montgomery Chemicals, LLC for complete product information, including suggested safety, handling, and storage procedures, transportation designations, and Material Safety Data Sheets. The material contained herein is believed to be accurate, however no warranty or guarantee is made as to accuracy or completeness. Nothing contained herein is to be construed as permission to infringe on any patent or license. Determination as to suitability of this product for a particular application is solely the responsibility of the user.