



From: Raymond Smith, Vice President - Quality and Warehousing

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Re: Recommended shelf life and storage conditions for liquid sucrose

Storage

- Storage requirements vary with the intended use of liquid sugar. Optimum storage temperatures range from 100 – 110°F. However, some accounts prefer to maintain a temperature below 100°F, down as low as 85°F.
- Higher storage temperatures provide less opportunity for microbiological growth. Storage temps above 110°F for an extended length of time will slowly increase color.
- Higher storage temperatures may result in condensation forming inside of the storage tank and may promote microbial growth. Proper ventilation is required to prevent condensation.
- Cleaning of storage tanks varies dependent upon the storage conditions. Some accounts clean after each load of liquid sugar is used. Some accounts clean on a given schedule, varying from every two weeks to once a month. Caution in cleaning must be taken as introducing water into the process may promote microbial growth. Cleaning should be accomplished with 180 – 190°F water with no sanitizing or cleaning compounds. Circulation and transfer lines should be cleaned-in-place (CIPed) with appropriate temperature, velocity, and pressure to assure no dead spots are neglected. Water exiting a pipe in an open system CIP process should fully fill the exit pipe to assure all surfaces in the piping have been cleaned.
- The air and air exchange equipment used in the ventilation of storage tanks must be maintained clean and free of microbial sources. Many accounts use filtered air and some accounts circulate UV treated air. Some accounts also have UV lights inside of storage tanks to impede microbial growth.
- Storage tank systems should be free of any “dead spots” in transfer lines. Dead spots are those places in piping systems that may allow for a pooling or non-movement of small portions of liquid sugar that may not get cleaned out during CIP cleaning. This allows for the liquid sugar to get old and possibly support microbial growth.

Shelf Life

- The most important effect on shelf life is proper storage conditions. Liquid sugar held at optimum storage condition will last for two weeks. The more concessions made from the optimum storage conditions the more shelf life will be diminished.

Please call or write if you have any questions or concerns. United Sugars Corporation is committed to continued service to our valued customers.

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