

Sugar Fortification

An Investment in the Future



Vitamin A deficiency (VAD) is considered one of the most prevalent micronutrient deficiencies worldwide. Through BASF Food Fortification program, vitamin A is added to staple foods in more than 40 countries. BASF is committed to combating VAD by offering reliable vitamin A product solutions with technical expertise in formulation and application. A sufficient supply of vitamin A is an investment in the future as it contributes to a healthier society.

Why Fortify Sugar?



Sugar fortification with vitamin A is an effective practice to combat vitamin A malnutrition in countries where sugar is widely used both in households and industrially. We offer specialized vitamin A powder, highly suitable for different sugar fortification applications. The particle size of the respective vitamin A powders ensure a homogenous distribution in sugar.

BASF Product Solutions

Our vitamin A powder are specifically developed for sugar fortification. They achieve highly competitive stability in the final product.



BASF Testing Solution

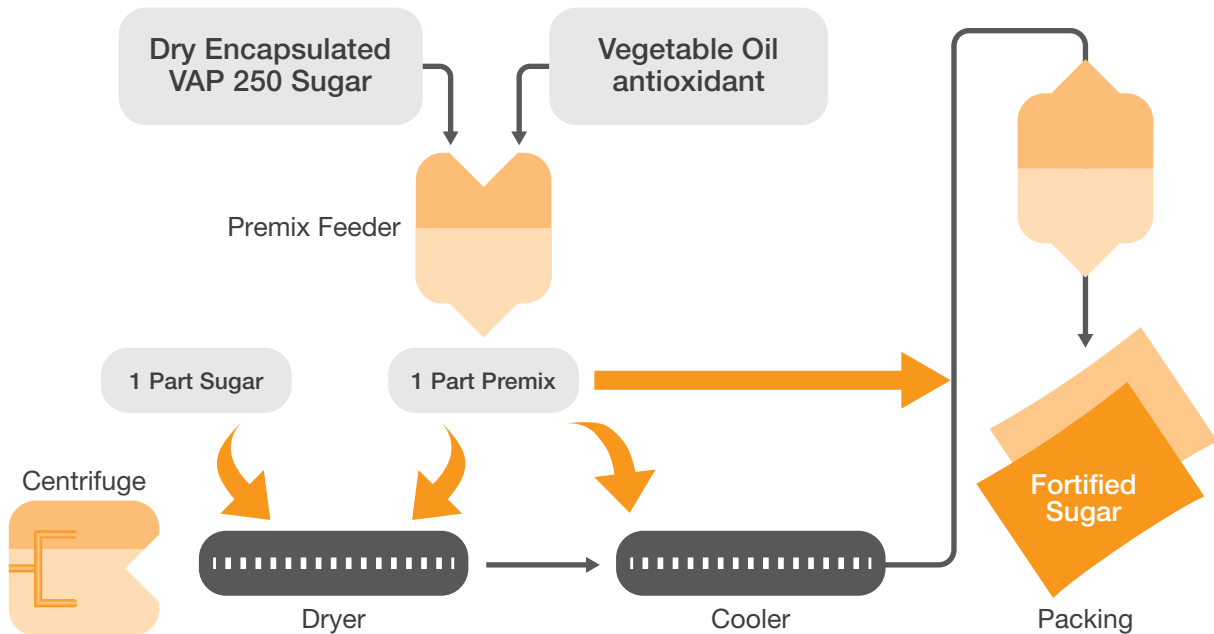
To test for vitamin A in sugar, BASF has developed a semi-quantitative Test Kits which can screen for the presence of vitamin A in sugar at a very low cost.



Sugar Fortification Principle

Refined or raw sugars are good carriers for vitamin A, with a vitamin A content that is typically 50 IU/g. The process begins by producing a premix of highly concentrated mixture. Made in a batch process, this premix consists of sugar, dry vitamin A palmitate and a small amount of vegetable oil. To ensure good stability of vitamin A in the final sugar product, it is recommended to add the sugar premix after the drying step.

Sugar Fortification Process



The vitamin A particles are spherical and smaller than the angular sugar crystals. Thus, to avoid segregation after the mixing process, the mobility of the vitamin A particles have to be reduced. This is achieved by the addition of a small quantity of vegetable oil, which reduces the mobility of the vitamin A particles.



Small vitamin A particles and angular sugar crystals

Stability

Stabilized by a proprietary tocopherol-based antioxidant system, our dry vitamin A palmitate powders perform above market standard in fortified bulk as well as table sugar.

