

Eastman **SUSTANE™** SAIB MCT

Food grade, kosher

(sucrose acetate isobutyrate/medium chain triglycerides)

Sustane SAIB food grade, kosher is a density-adjusting agent used in beverages that contain essential flavoring oils. SAIB MCT is a blend of Sustane SAIB and medium chain triglycerides. This blend is designed specifically for beverages that require a weighting agent with enhanced cloud properties, neutral taste, and ease of handling. The low viscosity of SAIB MCT provides a pourable liquid that can be added directly to flavoring oils without heating.

Technical information

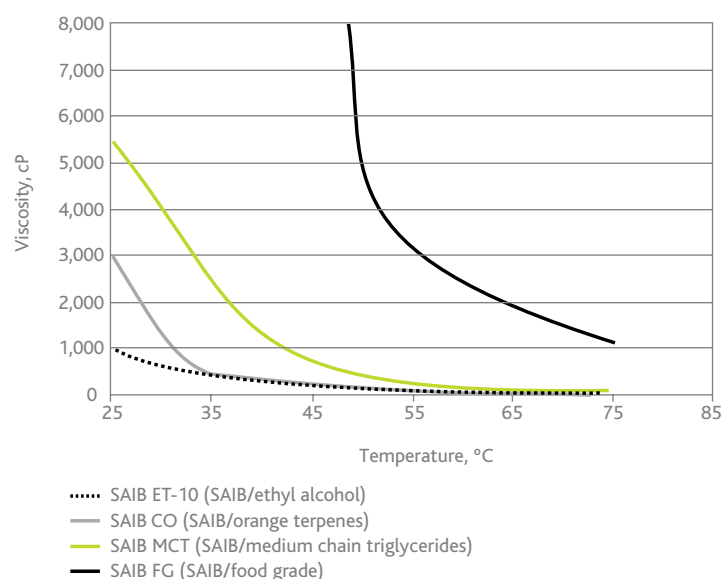
| Property | Typical value, units |
|-----------------------------|----------------------|
| Form @ 25°C | Pourable liquid |
| Medium chain triglycerides | 18%–22% |
| Density @ 25°C | 1.1 kg/L |
| Flash point, Tag closed cup | >99°C (>210°F) |
| Viscosity @ 25°C | 5,000 cP, approx. |
| Acid number (mg KOH/g) | 0.3 max. |
| Color, Pt-Co | 200 max. |

Properties

Because of its low viscosity at room temperature, SAIB MCT can easily be added to beverages at common operating temperatures and conditions. Addition can be accomplished by using standard transfer pumps and nonheated piping. Like Sustane SAIB food grade,¹ it dissolves rapidly in many flavoring oils and solvents. Sustane SAIB MCT will not interfere with flavor packages because it is odorless and flavorless at concentrations typically used in beverages.

Figure 1 shows the effect of temperature on the viscosity of Sustane SAIB food grade and its related blends. The viscosity of SAIB MCT is approximately 5000 cP at room temperature (25°C).

Figure 1.
Viscosity behavior of Sustane SAIB food grade, kosher and blended products



Applications

SAIB MCT is commonly used in cloudy beverages as a density-adjusting agent to prevent essential flavoring oils from separating in a finished beverage. It can be used as a replacement for or in combination with brominated vegetable oil (BVO) as well as glycerol ester of rosin (ester gum). SAIB MCT has many advantages over BVO and ester gum including ease of handling, taste neutrality, and wide regulatory approvals.

Storage and handling

SAIB MCT should be stored in a cool, dry warehouse. This material should be kept away from heat sources and UV light and stored in tightly sealed containers. Refer to Safety Data Sheet (SDS) for further information.

¹Eastman has proven Sustane SAIB to be hydrolytically stable in beverages.

Food regulatory clearances

Sustane SAIB MCT food grade, kosher is a blend of sucrose acetate isobutyrate (SAIB) and medium chain triglycerides (MCTs).

United States: SAIB MCT may be used as a stabilizer of emulsions of flavoring oils in nonalcoholic and alcoholic beverages at a level of 300 ppm in the finished beverage.

- SAIB may be used under the United States Food and Drug Administration (FDA) food additive regulations as a stabilizer of emulsions of flavoring oils in nonalcoholic beverages at levels of 300 ppm in the finished beverage (21 CFR 172.833) and is the subject of a Generally Recognized As Safe (GRAS) notification covering its use at the same levels in alcoholic beverages (GRN No. 104).
- MCTs, when used in a blend with SAIB as a beverage weighting agent, are regarded as GRAS. MCTs are the subject of a GRAS affirmation petition which the FDA accepted for filing with no limitations on use except those required by good manufacturing practice.

Other countries: SAIB MCT may be used as a stabilizer of emulsions of flavoring oils in nonalcoholic beverages at a level

of 300 ppm in the finished beverage in Argentina, Brazil, Canada, European Union, Norway, Paraguay, Switzerland, and Uruguay. Use level limits in Australia and New Zealand are dependent on the type of beverage (e.g., 200 ppm for soft drink and fruit drink products). GMP is the only guideline for Japan, Malaysia, and South Korea. The regulatory status in other countries is under review. For updated information, contact your Eastman representative.

This information is not to be taken as a complete and currently accurate representation of the regulatory status of this product, nor is it intended to imply that this product is not permitted in countries not specifically discussed. Prospective users should consult the appropriate regulatory agency in their country.

Packaging

SAIB MCT is packaged in 208 liter (55-gal. U.S., 45.8-gal. U.K.) closed-head steel drums. The drums have one 51-mm (2-in.) diameter opening and one 19-mm (¾-in.) diameter opening on top with no side openings. The net weight of each drum is 215.5 kg (475 lb). According to information provided by our drum supplier, the drums have been treated with linings that may lawfully be used in contact with foods.

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