

Technical Bulletin

T-Maz[®] 80K



T-Maz[®] 80K is a sorbitan monooleate that has been ethoxylated with approximately 20 moles of ethylene oxide to give a water soluble, oil and water emulsifier. This product is one of a group of ethoxylated sorbitan fatty acid esters, which are often referred to as Polysorbates. This surfactant is a mixture of partial esters of sorbitol and its anhydrides made from fatty acids, primarily oleic, which is then reacted with ethylene oxide to make it hydrophilic in nature. This product is designated with a "K" which means it has Kosher U Certification. T-Maz[®] 80K can be used as a solubilizer and emulsifier of oils and fragrances, wetting agent, viscosity modifier, antistat, stabilizer or dispersing agent. T-Maz[®] surfactants can also be used in the food, textile, and metalworking industries. Food applications include ice cream, shortening and edible oils, yeast defoamers, pickle products, vitamins and mineral preparations, whipped vegetable toppings, gelatin dessert mixes, defoamers in cottage cheese, and artificial colors in barbecue sauce. For more information, see Title 21 Code of Federal Regulations, Sections 172.840, 173.340 (a)(3) and 573.860.

Food Chemical Codex:

When fully tested, T-Maz[®] 80K meets the Polysorbate 80 specifications defined in the Food Chemical Codex.

Solubilities:

T-Maz[®] surfactants are generally soluble or dispersible in water, and, soluble in varying degrees in organic liquids. They are used for oil-in-water emulsions, dispersions, solubilizing oils and to make anhydrous ointments water soluble or washable. Frequently, in industrial applications, the T-Maz[®] surfactants are combined with similarly numbered S-Maz[®] surfactants to promote emulsion stability.

| Specifications | |
|--------------------------------|---------------------|
| Acid Value, mg KOH/g. | 2.0 Max. |
| Saponification Value, mg KOH/g | 45.0 – 55.0 |
| Hydroxyl Value, mg KOH/g | 65.0 – 80.0 |
| Water, % | 0.5 max |
| 1,4 Dioxane, ppm | 1 Max. |
| Heavy Metals, ppm | 10 Max. |
| Appearance | Clear yellow liquid |
| Typical physical properties | |
| POE Content | 20 |
| Form @ 25 °C | Liquid |
| Color, Gardner | 5 |
| HLB Value | 15.0 |
| Flashpoint, PMCC, °F | >350 |
| Boiling Point, °F | >300 |
| Specific Gravity @ 25 °C | 1.09 |

Shelf Life:

BASF will endorse the results on the certificate of analysis for a period of up to one year from the date of manufacture for material in original, unopened, unopened, properly stored containers. Beyond one year, we recommend the quality of the material be confirmed prior to use, by retesting the certificate of analysis parameters.

Please refer to the Material Safety Data Sheet (MSDS) for this product for instructions on safe and proper handling and disposal.