

ADWIL XPERT DT DI-ACETYLTARTARIC ESTERS OF MONOGLYCERIDES (DATEM)

E-472e

| Product Descriptions | |
|----------------------|-------------------------|
| Appearance | Brownish Viscous Liquid |
| Odour | Acetic acid |
| Taste | Sour |
| Delivery form | Liquid/paste |
| Specifications | |
| Acid Value | 70 - 95 |
| Physical Form | Viscous liquid |
| Saponification Value | 470 - 520 |

Product Statement:

DI-ACETYLTARTARIC ESTERS OF MONOGLYCERIDES (DATEM) is an emulsifier primarily used in baking. It is used to strengthen the dough by building a strong gluten network. It is used in crusty breads, such as rye bread with a springy, chewy texture, as well as biscuits, coffee whiteners, salsa con queso, ice cream, and salad dressings.

DI-ACETYLTARTARIC ESTERS OF MONOGLYCERIDES (DATEM) interact with the hydrophobic parts of the gluten, helping the proteins unfold and form cross-linked structures. It is composed of mixed esters of glycerin in which one or more of the hydroxyl groups of glycerin has been esterified by diacetyl tartaric acid and by fatty acids.

Benefits:

DATEM's main function is as a softener.

Used for all kinds of yeast-raised bread as a dough conditioner.

Suitable for strengthening the gluten network, enabling the gluten to retain the carbon dioxide produced during fermentation.

DATEM due to the ratio of hydrophilic to lipophilic groups 1:1, equally soluble in fat and dispersible in water.

DATEM is a surfactant with excellent protein complexing properties in yeast raised dough systems.

Increases the bread volume and improves crumb texture by strengthening the gluten network and by improved gas retention.

Highest volume effect in bread systems without fat.

Improves stability and machinability of the dough by excellent protein complexing properties.

Batter shock and proofing tolerance by increasing the elasticity and extensibility of the gluten.

Easier and finer dispersion of the shortening throughout the dough because of the emulsifiers' hydrophilic and lipophilic structure.

Unlike other commercially used dough emulsifiers, DATEM does not form starch complexes.

Application:

This functional ingredient is suitable to use in bakery products particularly yeast-leavened products, white bread, rolls rusks, and in flour mixes. Other applications are in Beverage whiteners, cream products, chewing gum, emulsified sauces, and canned coffee or tea.

Dosage:

The dosage levels for DI-ACETYLTARTARIC ESTERS OF MONOGLYCERIDES (DATEM) are varied from 0.5% to 1.0%.

***Usage may vary as per operating conditions.**