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Rinse Cycle Fabric Softeners

ABITEC has been a manufacturer of rinse cycle fabric softeners for more

than 25 years. Our vast experience and expert formulation knowledge provides us the flexibility to produce all types of tallow and vegetable-sourced DMS quaternaries (e.g., diamido amine, imidazolinium, and TEA ester quaternaries) at volumes from small pail to rail cars.

ABITEC's Accoquat rinse cycle fabric softener concentrates:

- improve product color and color consistency,
- improve formulation base odor (reducing fragrance loading),
- improve product dispersibility and ease of formulation, and
- provide cost effectiveness.

ABITEC has a long history providing custom work for the chemical manufacturing community. We respond with speed and flexibility to surges in demand. Our quaternary expertise is available for all your softener product needs and we are ready to assist, even the smallest customer formulation requirements.

Diamido Amine Quaternaries

A widely used dimethyl sulfate quaternary for fabric softeners that require very low textile yellowing (even at high dryer temperatures), excellent softening and static control, exceptional formulation stability (low hydrolysis rates), and ease of product handling and formulation.

In addition to hard and soft tallow base materials, ABITEC offers vegetable sourced quaternaries as a green alternative. These are typically more fluid and easier to work with than tallow based quaternaries. They can also be easily formulated into softener sours (softeners having acids like citric or phosphoric in them to neutralize residual caustic in the industrial washes) or softener detergent combination products.

Imidazolinium Quaternaries

Imidazolinium DMS quaternaries are the best softeners on an actives basis, providing superior static control and softening properties with a low base odor. Compared to diamido amine quaternaries, they soften 30% better on an actives basis.

ABITEC offers a vegetable sourced imidazolinium quaternaries as a green alternative. This type of quaternaries is typically more fluid and easier to work with than tallow based. They can also be easily formulated into softener/ sours or softener detergent formulations.

TEA Ester Quaternaries (Listed on CleanGredients.com)

TEA ester quaternaries are primarily used as consumer rinse cycle fabric softeners due to:

- being readily biodegradable (may be suitable for DfE formulations*),
- low base product odor,
- possess excellent product color and softening, and
- are widely accepted and used globally.

*Design for the Environment—This mark enables consumers to quickly identify and choose products that can help protect the environment and are safe or families. For more information regarding the designation, visit www.epa.gov/dfe.



Diamido Amine Quaternaries

Product	Physical Appearance at Room Temperature	Solvent	Actives (%)	Raw Material Base	Flammability [†]
Accoquat [®] 522 LM-90	Liquid	IPA	90	Soft tallow	F
Accoquat 522 LM-75	Liquid	IPA	75	Soft tallow	F
Accoquat 522 HF-90	Paste	DEG	90	Soft tallow	NF
Accoquat 422-75	Solid	IPA	75	Hard tallow	F
Accoquat 622 HF-90	Thick liquid	PG	90	Vegetable	NF
Accoquat 622-90	Liquid	IPA	90	Vegetable	F

Imidazolinium Quaternaries

Accoquat 875-90	Soft paste	IPA	90	Soft tallow	F
Accoquat 875-80	Liquid	IPA	80	Soft tallow	F
Accoquat OIMS HF-90	Liquid	PG	90	Vegetable-oleic	NF

TEA Ester Quaternaries

Accoquat STEQ-90 [‡]	Paste	IPA	90	Soft tallow	F
Accoquat VEQ HF-85 [‡]	Thick paste	PG	85	Vegetable	NF

[†]Flashpoint below 100 °F at (37.8 °C); Pensky-Martens Closed Cup procedure. [‡]Listed on CleanGredients. Visit www.cleangredients.com to learn more. Isopropyl alcohol (IPA) Diethylene glycol (DEG) Propylene glycol (PG)

For product recommendations, regulatory issues. and analytical inquiries, e-mail laundry.techsupport@abiteccorp.com.

Flammable (F) Nonflammable (NF)