



Vitech's Acid Replacement Technologies: Cost Effective, Safe, Environmentally Friendly



Solutions to Replacing Traditional Acids

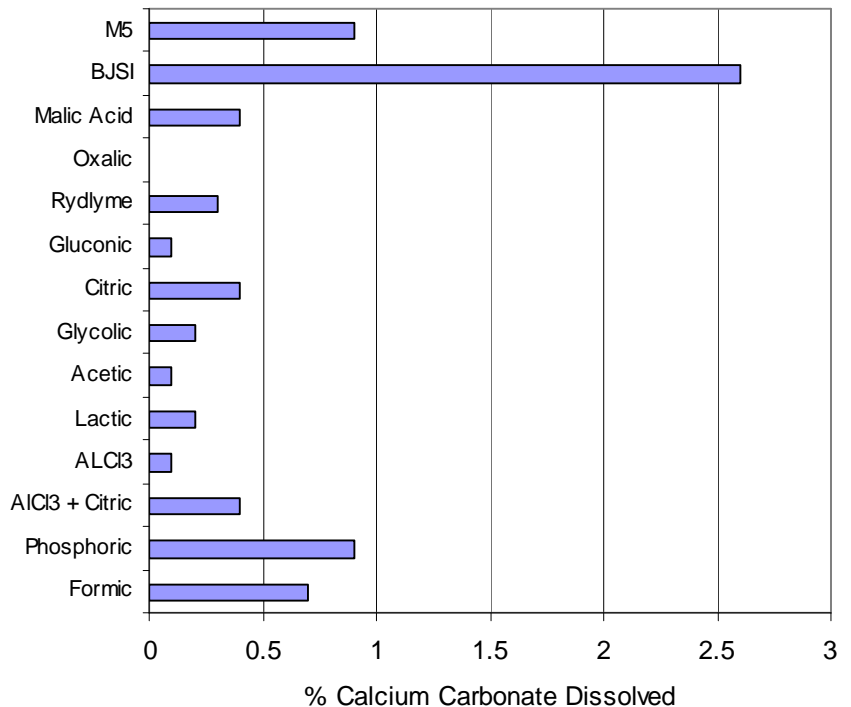
With the cost and supply issues of phosphoric acid, many customers are forced to examine other alternatives.

Vitech offers a range of acid replacement technologies that offer cost, performance and environmental advantages versus phosphoric acid and many other traditional acids.

BJS-I

- A cost-effective replacement for phosphoric acid and many traditional acids
- Approximately 2 times more effective than phosphoric in dissolving calcium carbonate
- Classified as a mild skin irritant
- Phosphate free and contains no VOCs
- Can be shipped DOT non-regulated for U.S. ground shipments

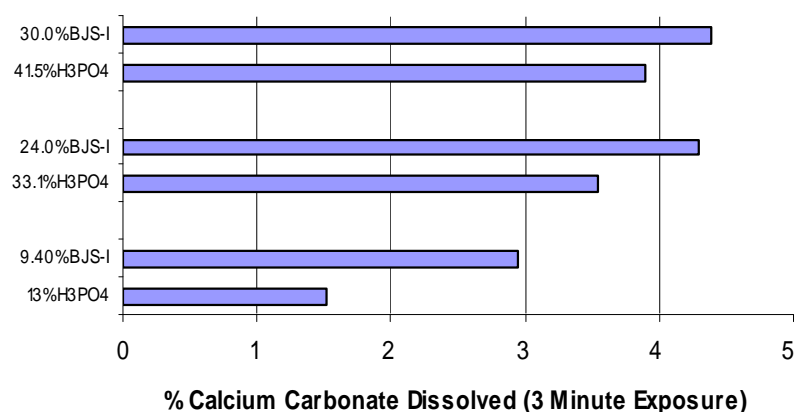
Calcium Carbonate Dissolving Properties of Acids
(3 Minute Exposure using 200g of 5% Active Solution)



Primary Applications for BJS-I:

tub and tile, grout cleaners, bowl cleaners, descalers / delimers, concrete preparation and etch products, acid stains, pool & spa, pH adjustment, boat hull cleaners

Comparison of Calcium Removal
BJS-I vs. Phosphoric Acid (85% active)



Calcium carbonate solubility test conditions: 200g products, for 3 minutes. BJS-I supplied as is. Phosphoric acid supplied as is (85%).

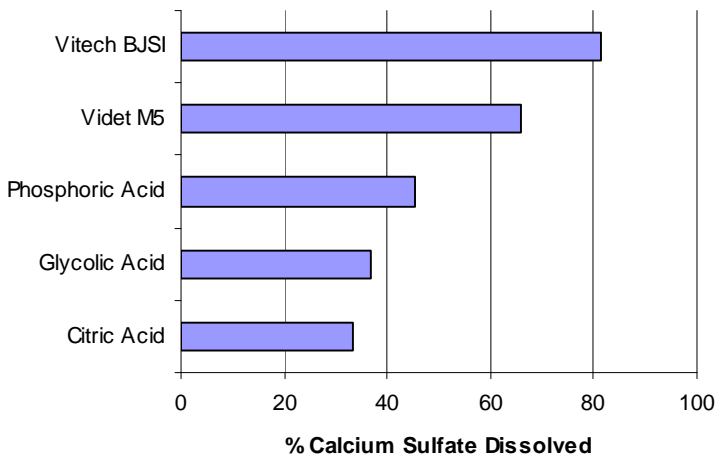
M5

- Odorless, colorless, low foaming
- Classified as a non-skin irritant
- Can be shipped via air, sea or ground as a non-regulated material
- Safe on most metals including aluminum, polished aluminum, copper and stainless steel
- Phosphate free and contains no VOCs
- Ship non-regulated for air, ground or marine

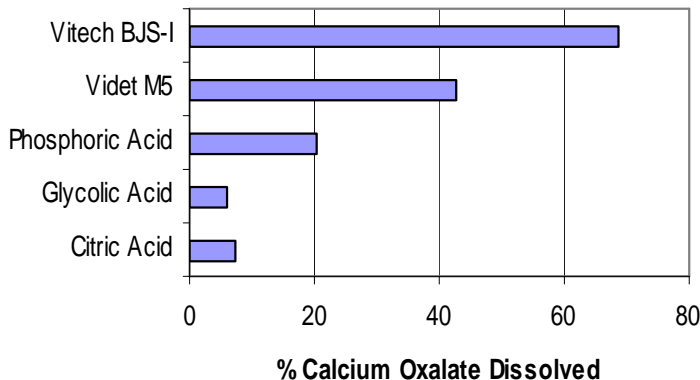
Primary Applications:

food & dairy (beerstone and milkstone), Clean-In-Place (CIP), tub 'n' tile cleaners, coffee pot descalers

Calcium Sulfate Dissolving Properties of Acid
(5 Minute Exposure - 50g of 5% Active Solution)



Calcium Oxalate Dissolving Properties of Acid
(5 Minute Exposure - 50g of 10% Active Solution)



ALB

- Replacement for hydrofluoric and other traditional acids
- Will not frost glass
- Classified as a non-irritant to skin
- Effectively removes oxides and brighten aluminum

Primary Applications:

2 step acid pre-soaks, wheel cleaners, aluminum brightener



An M5 based formulation is ideal for cleaning beerstone and milkstone.



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