

Driven by nature. Backed by science.

TECHNICAL DATA SHEET

0-0-12

Liquid · acid-complexed potassium

Sigma K-Ferm

Advanced fermentation for superior nutrient uptake

A high-efficacy liquid potassium source from a proprietary microbial fermentation. Low-molecular-weight (LMW) organic carboxylic acids complex the potassium for rapid uptake and support soil health. Part of the Sigma Liquid Foundation Program.

Acid-complexed K
Potassium carried by natural LMW organic acids for rapid, complete uptake by soil or foliar spray.

Stress tolerance
Regulates stomata, water use and cell pressure through heat, drought and traffic.

Soil health
Lowers salinity, improves permeability and helps regulate soil pH.

Product properties

Analysis	**0-0-12**
Soluble potash (K_2O)	**12%**
Derived from	**Sunflower hull ash**
Weight	**9.85 lb / gallon**
Specific gravity	**1.18 kg / L**
pH	**6.86**
Appearance	**Pale molasses brown**
Odor	**Slightly sweet**
Filtration	**Below 105 microns**

Fermentation contribution

Plant-derived potassium (K_2O)	**1.18 lb**
LMW natural organic acids	**2.0 lb**

Secondary-metabolite biostimulants: LMW organic carboxylic acids (formic, acetic, lactic, succinic, propionic, butyric, valeric and caproic) aid nutrient transport, permeability and water-holding capacity.

Application

Banded equipment, irrigation and fertigation, drip lines, or direct soil and foliar spray. For other crops, consult a trained soil specialist for region-specific rates.

Rates · Sigma Liquid Foundation Program

SPRAY INTERVAL	OZ / ACRE	OZ / 1,000 FT²
Weekly (7-day)	22–44	0.5–1.0
14-day	44–88	1.0–2.0
21-day	66–132	1.5–3.0

Tank order

Fill the tank one-third with water and agitate. Add Sigma Bio, Molasses, Microalgae, Biochar 5m, Seaweed, then K-Ferm last. Build the scheduled spray on top.

Why it works

- High efficacy, rapid potassium uptake
- Aids enzyme activation, photosynthesis and nitrogen metabolism
- Moves starches and sugars for recovery and resilience
- Safe for plants and seeds: no phytotoxicity risk
- Compatible with blending, tank mixing and fertigation

Packaging: 2.5 gal (9.46 L) · 275 gal tote (1,041 L).
Storage: Store in the original container in a temperature-controlled space to avoid freezing. Do not mix with other fertilizers or pesticides in storage.

Manufactured and guaranteed by Sigma AgriScience. Always read and follow label directions; confirm state registration.