

Mixing Guide / pH Chart

1. When in doubt as to compatibility, please perform a jar test before mixing in large quantities.
2. The mixing container should be fiberglass, plastic, stainless steel, or rubber lined, and capable of withstanding heat exchanges.
3. Use a large enough container to adequately handle the initial mixture, plus room in the container for at least twice the water.
4. Use a good stir rod such as a 3-to-6-foot PVC pipe, or use a mix tank agitation system.
5. Start making the mix by adding into the container half the water you plan to use.
6. Use a 3-gallon measuring bucket with a handle for measuring the products to add and/or use a 1-quart/1-liter measuring pitcher with ounces and/ or mL increments for small measurements.
7. Add in or mix the HUMA GRO® products into the water in the order from most acidic to most basic or alkaline. From pH (≤ 1.0) to pH (≥ 14.0) as shown below.
8. Fill the container capacity with the rest of the water you will use.
9. As a rule of thumb, leave the products with the most basic pHs (> 7.0) such as SUPER POTASSIUM® until the very last and add very slowly. If there is a reaction it will be immediate, but with a little patience and stirring it should mix in well.
10. If adding a pesticide or fungicide to the fertilizer solution, add after all the HUMA GRO® products are thoroughly mixed. Do a jar test first for compatibility.
11. Never apply total HUMA GRO® products plus other ag chemicals at more than 10% concentration of the finished application mix.

PRODUCT pH (Acidic to Basic)

CALCIUM	≤ 1.0	Z-MAX®	4.0–5.0
SUPER PHOS® (PHOS-MAX®)	≤ 1.0	ZAP®	4.0–5.0
GOLDEN PRO®	≤ 1.0	PROUD 3®	4.5–5.5
C-PHOS™	≤ 1.0	FERTIL HUMUS®	5.0–6.0
SULFUR	1.0–1.5	PROMAX®	5.0–6.0
D-FEND®	1.0–2.0	AN-MAX™	6.0–7.0
NICKEL	1.0–2.0	ENCAPSALT®	6.0–7.0
ACTIVOL®	1.0–2.0	KLEENUP™	6.5–6.7
COMOL™	1.0–2.0	2-16-16™	6.5–7.5
MAX PAK®	1.1–2.0	38 SPECIAL®	6.5–7.5
MANGANESE	1.5–2.0	BORO-PRO®	6.6–7.6
FULVI PRO®	1.5–2.5	SUPER NITRO®	7.0–8.5
44-MAG®	1.5–2.5	START-L™	7.5–8.5
BREAKOUT®	1.5–2.5	BUFFER K®	8.0–9.0
VITOL® II	1.5–2.5	HUMA PRO®	8.0–9.0
VITOL®	1.5–2.5	FERTIL SOIL®	8.0–9.0
IRO-MAX®	1.5–2.5	X-TEND®	8.0–9.0
CROP-GARD®	1.6–2.6	X-TEND® B	8.25–9.25
COPPER	2.0–3.0	MOLYBDENUM	8.5–9.5
COBALT	2.5–3.5	SILI-MAX®	11.0–12.0
PUR CAL™	2.5–3.5	SIL-K®	≥ 14.0
LUCKY 7®	3.5–4.5	JACKPOT® (YIELD-MAX™)	≥ 14.0
SURF-MAX®	4.0–5.0	SUPER POTASSIUM®	≥ 14.0