



# Spectra Max Tech™

## Manufacturing Concentrate

### GENERAL INFORMATION

Spectra Max Tech is a manufacturing concentrate that contains an integrated water conditioning system with an optimized rate of viscosity modifiers.

Spectra Max Tech is formulated to provide a labor and material cost savings for local facilities to use their own source of dry ammonium sulfate and water to formulate a finished tank mix adjuvant containing liquid AMS Water Conditioning Agent / Drift Reduction Agent / Deposition Aid / Antifoaming Agent.

Following the supplemental Formulating and Packaging Guidelines, the finished blend will deliver 8.5 pounds of liquid ammonium sulfate-based water conditioning agent per 2.5 gallons of finished blend adjuvant that enhances herbicide performance by modifying the pH and water hardness of the spray solution. The ammoniacal nitrogen in the finished blend promotes herbicide (such as glyphosate) uptake in agricultural applications. The finished blend will contain a drift suppressing agent that reduces off-target drift and a deposition aid that contains emollients to keep the spray deposit moist for maximum absorption and a pH stable antifoam which helps control foaming during tank mixing.

**IMPORTANT:** It is recommended that local AMS sources be tested for compatibility prior to conducting large scale formulations. Your KALO representative can provide this service.

Spectra Max Tech is not to be used as a tank mix adjuvant, and is not for retail sale.

### TECHNICAL INFORMATION

**Net Weight:** 9.59 lbs/gal

**Specific Gravity:** 1.13-1.15

**Flashpoint:** >200°F PMCC

**pH:** 5.0-6.2 (1% aqueous solution)

**Solubility in Water at 20°C:** Soluble

**Color & Appearance:** Slightly Hazy Yellow Liquid

**Odor:** Sweet

**Storage Temperature - Minimum:** 32°F

**Storage Temperature - Maximum:** 120°F

**DOT/IMDG Transportation:** Not Regulated

**Registered With CDPR:** No

**Registered With WSDA:** No

### PRINCIPAL FUNCTIONING AGENTS

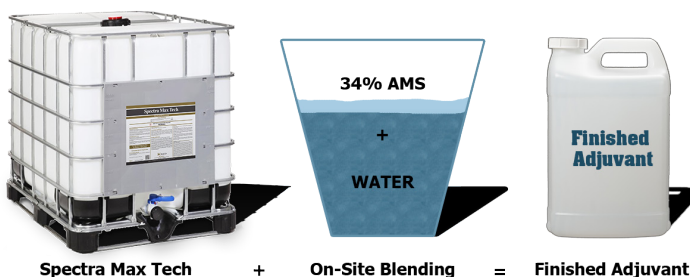
Sodium polyacrylate-citrophosphate glycerol complex with siloxane.....18.00%



### PACKAGING

265 gallon tote  
1 tote per pallet  
Item#: SMTECH265

For Manufacturing Use Only - Do Not Mix In Spray Tank  
Compatible With All Glyphosates, Glufosinates and 2,4-D Herbicides



**KALO**

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KALO, Inc., 13200 Metcalf Ave. Suite 250, Overland Park, KS 66213 • www.kalo.com  
Important: This information is not a substitute for the label. Always read and follow label instructions.

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# PRODUCT INFORMATION



## Spectra Max Tech™

### GUIDELINES FOR HANDLING, STORAGE, FORMULATING AND PACKAGING

#### VESSEL INFORMATION

- Receive into a clean dry tank or holding vessel.
- Vessel should be free from any oils or surfactants which may not be soluble in SPECTRA MAX TECH.
- Avoid contaminating with other materials.
- High density plastic or stainless-steel storage tanks are preferred.
- Avoid mild steel tanks as iron is reactive with certain components.
- Avoid using holding vessels which have contained materials of extreme pH (high or low) as this will negatively affect the polymer system.

#### HANDLING

- It is recommended to use gloves and eye protection when handling this product.
- Product is very soluble in water and can be washed off easily.
- The Manufacturing Concentrate contains a pre-swelled polyacrylamide polymer that will exhibit stringy characteristics and will make surfaces slippery.
- Use caution when handling and rinse surfaces thoroughly with water to remove residue.
- Avoid excessive pumping, such as continuous recirculation of the concentrate, as this negatively affects the polymer performance.

#### STORAGE

- Avoid freezing or extremely cold temperatures for extended periods.
- Avoid prolonged storage in bulk. SPECTRA MAX TECH contains a silicone defoamer which will separate over time. Prolonged storage in bulk will cause uneven layers of defoamer product with significantly higher than desired levels of defoamer at the top of the tank.
- Defoamer separation in the packaged product is usually manageable and re-dispersible in final package size.

#### FORMULATING AND PACKAGING

- SPECTRA MAX TECH is designed to be used as a manufacturing concentrate only and is NOT intended to be packaged without further formulating.
- SPECTRA MAX TECH is designed to be blended into a concentrated Ammonium Sulfate solution.
- Final % AMS content should NOT exceed 34% in the finished product.
- Recommended use level of SPECTRA MAX TECH in finished product is 20%. This delivers 4% AMS into the finished product.
- Finished blend should be blended long enough to fully hydrate the polymer concentrate.
- Recirculation pumps may be used to enhance solution but DO NOT TURN OVER more than once as this affects the efficiency of the polymer activity.
- The finished product should be filtered prior to packaging using a 5 to 100-micron filter (the smaller micron size is preferred). This is to prevent trash (collected from transportation, internal transferring from holding, and formulating) from being packaged and to filter out any non-dispersed defoamer which might have escaped initial filtering.
- It is normal for small amounts of gelled polymer and white defoamer to collect in the final filtering.
- An additional final polishing filter of similar porosity should be used immediately prior to packaging to result in a clear high-quality product.
- Finished packaging should be polyethylene or polypropylene types.
- Avoid metal packaging containers as the AMS as well as other components will react with iron and cause corrosion as well as reduction of activity of the blend.

#### RECOMMENDED FIELD USE RATES

- 2.5 gallons per 100 gallons spray mix.

**FOR MANUFACTURING USE ONLY - DO NOT MIX IN SPRAY TANK  
COMPATIBLE WITH ALL GLYPHOSATES, GLUFOSINATES AND 2,4-D HERBICIDES**

#### FORMULATION RECOMMENDATIONS

COMPONENT	% wt/wt	LBS/GALLONS
Water	49.50%	4.975 lbs
AMS Powder	30.50%	3.065 lbs
Spectra Max Tech	20.00%	2.010 lbs
Total	100%	10.050 lbs

#### LABEL RECOMMENDATIONS

Using the formulation recommendations in chart to the left, the below label recommendations are as follows:

Ammonium Sulfate	34%
Glycerol Acid (citro phosphate complex and siloxane)	3%
Inert Ingredients	63%
Total	100%



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