Activating SCD Probiotics Mother Cultures™

Welcome to the wonderful world of DIY microbial and probiotic mother cultures, also known as starter cultures. Our Activation Guide can be used to activate any one of SCD Probiotics's Mother Cultures.

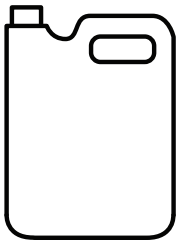
SCD Probiotics Mother Cultures are **simple to activate to create 20x more product:**
1 gallon of SCD Probiotics Mother Culture creates 20 gallons of probiotic product for you to use and apply. **Save money, save resources, DIY**.

Step 1: How Much Will You Make?

First, decide how much volume you want to create. The most common volumes are 5 Gallons for Home & Garden Use and 275 Gallons for Farm Use.

Use a clean plastic bottle, container, or large tank with a screw-on lid. For smaller quantities, you can even use a cleaned out plastic soda bottle with a screw on lid. You can also find airlocks and other containers at any local or online home brewing supply store.

- **For 5 Gallons:** Use 0.25 Gallons Mother Culture + 0.25 Gallons Molasses* + 4.5 Gallons Dechlorinated Water
- **For 275 Gallons:** Use 14 Gallons Mother Culture + 14 Gallons Molasses* + 252 Gallons Dechlorinated Water



5-Gallon Size for Home & Garden

275-Gallon Tote Size for Farm Use

To activate a different amount than the examples in this guide, use a **1:1:18 ratio** to calculate the materials needed (1 Part Mother Culture + 1 Part Molasses* + 18 Parts Dechlorinated Water).

Step 2: Mix Materials

Make sure the dechlorinated **water temperature is between 97-104° F** (36-40° C).

1 Part SCD Probiotics Mother Culture

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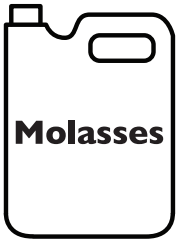

1 Part Molasses*

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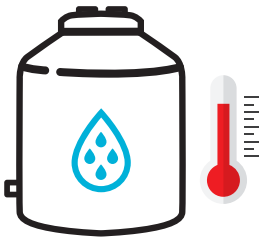
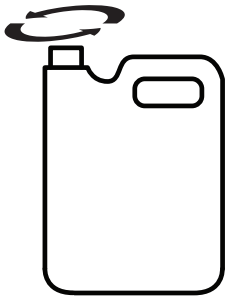


18 Parts Dechlorinated Water

Step 3: Close Lid to Seal



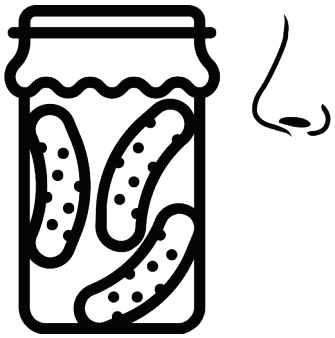
Step 4: Let Actively Ferment

Let your mixture actively ferment in a warm environment for **3-10 days**, checking it every 3 days. The length of time will vary based on how warm your environment is (for example, fermentation will take longer in early spring and late fall than it will in warmer months—the warmer it is, the faster the fermentation process will go).

Step 5: How Will I Know It's Ready?

Your end product should **smell slightly sweet and pickled** (fermented).

You can also check for readiness with a pH meter. SCD Probiotics is activated and **ready-to-use once its pH drops to 3.7 or below**. Note: if your pH continues to drop to 3.0 or even 2.0, this is normal and indicates high microbial activity.



Step 6: Store

Store your activated SCD Probiotics Mother Culture at room temperature and **out of direct sunlight**. When stored in these conditions, it will be shelf stable and "ready-to-use" for **12+ months**

12+ Months

Step 7: Dilute and Use

For general use, **Dilute 1:1000 (ex. ¾ tsp to 1 gallon) with dechlorinated water**.

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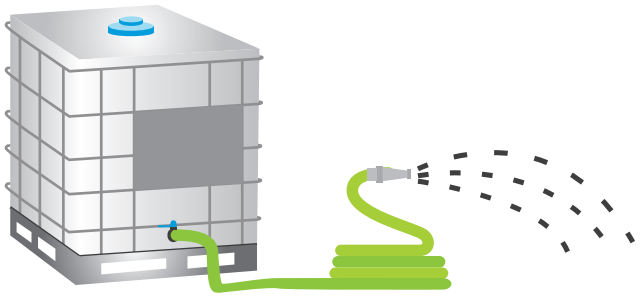
OR



*If you are under strict requirements to get all inputs used on your farm certified, please check with your certifier on the source of your molasses. We're also happy to supply an organic blackstrap molasses for sale on our website, which can be used to activate any SCD Probiotics Mother Culture.

Application Guide for ProBio Balance Original

Dilute 1:1000 and use. Ok—but really, how much? And what for? Below is a guideline for *activated* ProBio Balance Original applications.

Dilute with **dechlorinated** water before using.

Application	Dilution Ratio Activated MC to Dechlorinated Water	Dilution Example	How to Use
Food Compost—to Decrease Odor & Accelerate Decomposition	1:100	2.5 Tbsp. per 1 gallon	Spray compost pile or windrow before and after turning.
Smoke Fumes	1:10	2 Tbsp. per 1 Cup	Spray dilution on floors, carpet, upholstery, drapes, or any affected area. For light-colored fabrics, spot test first.
Yard Compost—to Decrease Odor & Accelerate Decomposition	1:100	2.5 Tbsp. per gallon	Saturate compost with dilution. Apply weekly to keep moist.
Trashcans—to Decrease Odor	1:500	1.5 tsp. per 1 gallon	Spray inside of trashcan and wipe excess with a damp rag. Mist around area as needed.
Pet Odors	1:100	2.5 Tbsp. per gallon	Spray dilution on floors, carpet, upholstery, or any affected area—including kitty litter boxes.
Swamp Coolers and Dehumidifiers—to Clean & Prevent Mold Growth	1:500 – 1:1000	1.5 tsp. per gallon – ¾ tsp. per gallon	Wipe all surfaces and spray down with dilution as needed.
Gutters and Siding—to Clean	1:500	1.5 tsp. per gallon	Clear leaves and debris, then pour dilution down gutters. For siding, use dilution in a power washer, or spray dilution on siding then scrub using brush. If using primer: apply primer first, then wait 1 week to apply dilution.

Application Guide for ProBio Balance Plus

Dilute 1:1000 and use. Ok—but really, how much? And what for? Below is a guideline for *activated* ProBio Balance Plus applications.

Dilute with **dechlorinated** water before using.

Application	Dilution Ratio Activated MC to Dechlorinated Water	Dilution Example	How to Use
Microbial Soil Inoculant	Mix into irrigation or spray tank	1 gallon per acre	Mix 1 gallon or more of Activated ProBio Balance Plus into your spray tank, diluted with enough water per acre to ensure even coverage (typically 10-40 gallons per acre).
Crop Residues	Mix into irrigation or spray tank	1 gallon per acre	Mix 1 gallon or more of Activated ProBio Balance Plus into your spray tank, diluted with enough water per acre to ensure even coverage (typically 1-5 gallons per acre). Apply on top of crop residues or before incorporating into soil.
Orchards	Mix into irrigation or spray tank	10 gallons per acre	Mix 10 gallons or more of Activated ProBio Balance Plus into your spray tank, diluted with enough water per acre to ensure even coverage (typically 10-60 gallons per acre, per season). Note: Do not spray during blossoming/fruiting or blooms/fruit may drop.
Drain Maintenance	Undiluted	½ Cup	Pour down drains 1-2x per week.

Application	Dilution Ratio Activated MC to Dechlorinated Water	Dilution Example	How to Use
Grease Traps	1:100 (Probiotics: Grease)	2.5 Tbsp. per 1 gallon of grease	For normal buildup levels, apply every 4-6 months to maintain low grease trap levels. Depending on the type or amount of build-up, can be applied more often.
Latrine / Solid Waste	1:50 (Probiotics: Grease)	5 Tbsp. per gallon of waste	Add weekly, monthly, or as needed. For best results, keep covered.
Compost	1:100	2.5 Tbsp. per gallon	Spray pile or windrows before and after turning, then cover with bag or plastic cover.
Drain-Off Lagoons	1:100 (Probiotics: Lagoon Water)	2.5 Tbsp. per gallon of lagoon water	Apply dilution to drainage every 1-2 weeks.
Sewer Line and Septic System Maintenance	1:500	1.5 tsp. per gallon	Apply dilution every 2 weeks in the first month, then repeat 1x monthly.
Lawns	1:1000	¾ tsp. per gallon	Apply dilution as a spray or as an additive to water system during each watering.

Application Guide for SCD BioAg Mother Culture

Dilute 1:1000 and use. Ok—but really, how much? And what for? Below is a guideline for *activated* SCD BioAg Mother Culture applications.

Dilute with **dechlorinated** water before using.

Application	Dilution Ratio Activated MC to Dechlorinated Water	Dilution Example	How to Use
Soil Treatment	Mix into irrigation or spray tank.	1 gallon per acre	A good, moderate goal is to apply 40 gallons of Activated SCD BioAg Mother Culture per acre per year. If using an irrigation system, you can apply 1-3 gallons per acre per week, depending on how long your growing season is. If using spraying equipment, mix 1-3 gallons into your spray tank, diluted with enough water per care to ensure even coverage, and apply 5-8 times during the growing season. For aggressive treatment, a maximum of 60 gallons per acre per year can be applied.
Foliar Feed	Mix into irrigation or spray tank	1.5 – 3 gallons per acre	Mix 1.5-3 gallons per acre into your spray tank, diluted with enough water to ensure even coverage. Activated BioAg Mother Culture is best applied as part of your foliar nutrient program, once per week throughout your growing season.

Application	Dilution Ratio Activated MC to Dechlorinated Water	Dilution Example	How to Use
Orchard	Mix into irrigation or spray tank.	10 gallons per acre	Mix 10 gallons or more of SCD BioAg Mother Culture into your spray tank, diluted with enough water per acre to ensure even coverage (typically 10-60 gallons per acre, per season). Note: Do not spray during blossoming/fruiting or blooms/fruit may drop.
Lawns	1:1000	¾ tsp. per gallon	Apply dilution as a spray or as an additive to watering system each time you water.
Seed Soak	1:1000	¾ tsp. per gallon	Soak small seeds: 5-10 minutes; Soak medium seeds: 10-20 minutes; Soak large seeds: 20-30 minutes. Continue to spray seeded area monthly with dilution during crop growth.
Trees and Flowering Plants	1:1000	¾ tsp. per gallon	Spray soil and foliage with dilution during every season. Do not spray blooms or they may drop. To prepare soil before seeding, apply 3 weeks before. Add dilution monthly while watering. Apply to soil when preparing for the fall season.

Every grower operation is different, and we're happy to help customize a solution for your specific growing needs. For customized applications, please contact customerservice@scdprobiotics.com.