



GUARANTEED ANALYSIS

Ammonium Laureth Sulphate : 55 % (w/v)

BENEFITS

SC-55 is an excellent natural soil conditioner designed to prevent soil compression or to eradicate existing compression.

SC-55 is 100 % natural. It is made of coconut and palm.

SC-55 has an excellent formulation that can be degraded biologically (96 - 99 %) without chemical toxicity.

SC-55 when applied, penetrates the deeper layers of the soil via the vertical movement of the water, thereby filling the gaps in the soil and cutting through hard layers.

SC-55 provides solutions to problems such as soil compaction, formation of slip layering and ponding.

SC-55 can be applied during any period of the year. Spring and Autumn applications are however much more convenient. It is homogenously applied to the soil by pulverizing. During the application process, it is necessary for the soil to be tempered after 30 days of precipitation or watering, to obtain effective results. SC-55 can be safely used in all kinds of plant nutrition products (humic & fulvic acids, drip irrigation straw, ...) and with plant protection products (herbicide, pesticide, ...).

SC-55 is able to be used safely with other soil applied plant nutrition products that are applied vertically in to the soil, which aids better penetration.

BENEFITS OF ADDING SC-55 TO STARTER FERTILISER MIXES

SC-55 sharply reduces tension in the soil, and also reduces tension within the mix, permitting superior homogenisation of the ingredients being mixed.

1.SC-55 encourages seed to soil contact.

2.SC-55 allows the soil to warm more quickly, by having excess water move through the soil rapidly, providing a warmer root zone for good seed germination.

3.SC-55 breaks down bound water in the soil, permitting bonding of the nutrients in the area of the root zone.

4.SC-55 breaks down tension in the root zone, and therefore when added to liquid fertilisers, it provides a more even distribution of nutrients to the roots. The plant roots do not have to struggle to reach the nutrients.

METHODS OF SECURING THE BENEFITS OF SC-55

Concept: SC-55 may be injected into the fertiliser basically at any time, and under normal conditions will remain suspended in the solution mix.

1.Add 60 ml. of defoaming agent to the SC-55.

2.Mix the SC-55 (with defoaming agent) with equal parts of water. This solution will help distribute SC-55 in the fertiliser solution, allowing for easier mixing.

3.As an example of the above: Liquid Fertiliser for 4 Ha; use a 60 ml. SC-55 rate – use 600 ml. SC-55 and 600 ml. of water, then add to fertiliser mix. This should mix with little to virtually no agitation.

CONDITIONING OF SOILS?

All crops can benefit if the soil structure is improved. Pastures (particularly dairy) can also benefit from SC-55 treatment. Grazing stock can be returned to the pasture soon after spraying.

TILLAGE & SOIL PERMEABILITY

SC-55 improves soil friability by reducing soil shear strength. Less shear strength means easier tillage, which results in savings on fuel costs and less wear and tear on equipment.

SC-55 works in the hardpan, which reduces root stress. In fact, scientific studies show SC-55 improves the soil's porosity and permeability, while reducing plasticity.

INSTRUCTIONS FOR USE

It is suitable for all kinds of crop production. The applications are homogenously pulverized and mixed (15 - 20 cm.) into the annealed soil. It can be applied by drip irrigation.

SC-55 recommended broadcast rate is 180 to 300 ml. / per acre.

SC-55 is effectively impregnated and applied with dry materials at a 180 ml. rate.

SC-55 is also effective in 29.57ml to 59.14ml per acre seed trench treatments with an additional 118.29ml – 147.86ml broadcast or applied with dry materials.

SC-55 application in spring or fall is recommended.

SC-55 applications of 59.14ml to 177.44ml per acre can be made additionally throughout the crop year if deemed necessary.

SC-55 enhances effectiveness of other products when used in combinations.

SC-55 can be applied by any conventional farm spraying method - mist blower, boom sprayer, center pivot irrigation system, or aerial application.

SC-55 is compatible with most spray solutions and will actually aid chemical incorporation. If their label says; "DO NOT USE A SURFACTANT", do not use SC-55.

SC-55 should be compatibility checked prior to mixing in your spray tank.

SC-55 is a commercial anionic, non-toxic, biodegradable liquid additive.

SC-55 is safe to spray on all crops and pastures.

SC-55 can be used safely in soil preparation and in every period of production.

In the autumn after the harvest and 1 - 2 weeks before planting or planting in the spring.

SC-55 is applied homogeneously to the soil. (1 Lt. / Ha).

SC-55 must be mixed with soil to get better results and within 30 days after the application, rainfall or irrigation should be done at 50 ml. per square metre.

SC-55 can be used safely in combination with Herbicides, Pesticides and Fertilisers.

The efficacy of SC-55 is not decreased if the soil is cultivated after treatment.

APPLICATION TIME:

SC-55 can be applied anytime; however, with crops such as cotton, cereals, vegetables, etc., the preferred times are pre-planting and post-harvest.

DOSAGE

Soil Application : 1 - 2 Lt. / Ha for Each Year.

MIXABILITY

Except for acid and alkaline products, all plant nutrients are compatible with phytosanitary and plant growth regulators. SC-55 is believed to be compatible with most liquid fertilisers, insecticides, fungicides, and pre-emergent herbicides. Do not mix SC-55 with chemicals that are known to be injurious to the seeding before emergence, or post emergence herbicides. A compatibility test should be carried out before mixing in the bulk spray vat.

pH Reducers Salinity Correctors Soil Amendments and Adjuvants

FEATURES

HOW SC-55 WORKS IN THE SOIL

SC-55, a commercial anionic, soil-amending agent, affecting changes in the surface tension of the hygroscopic (bound) water in the soil, similar to the way a wetting agent acts upon surface water, but with dramatically different results. The ionic nature of soils, particularly clays, and the polarized molecular structure of water results in very strongly bonded (hygroscopic) water in the soil system. It is the strength of this soil-water adhesion which leads to soil compaction, resulting in poor water infiltration, low overall water-holding capacity, reduced soil aeration, and high soil shear strength. By penetrating to vertical depths of three to four feet (over 1 metre), and by acting upon the bound water (unlike wetting agents which act on surface water), SC-55 demonstrates long-lasting improvements in each of these soil properties. One of the most readily observed results of application of SC-55 is an improved water infiltration rate.

By breaking down the adhesion that creates compaction of soil into rigid structures, particularly into a hardpan layer, SC-55 readies the soil for much deeper and faster influx of water. The increased penetration of water results in reduced run-off, evaporation, and standing water in previously wet areas. A related benefit of SC-55 application is an increase in the water-holding capacity. By releasing a portion of the bound water to move as free water in the soil, the total water available for plant use is increased. Thus, water efficiency is increased and the requirements for irrigation, both in amount and frequency, are reduced.

Further removed from immediate view, the breakdown of adhesion in soil structures produces a more open, better-aerated soil profile. As a consequence, the treated soil is more oxygenated and sustains an increased biological community. These benefits are observed as increased fertiliser efficiency and humus development. Lastly, the breakup of compaction in soil results in a reduction in soil shear strength. The forces required for plant roots to penetrate the soil are thereby decreased, resulting in deeper and more uniform growth. Crusting and clods are reduced. Ease of tillage is enhanced. In summary, SC-55 addresses a range of problems resulting from soil compaction. Because the soil itself is altered, results are much longer lasting than those obtained via surface water surfactants. Benefits are evident at first watering or rainfall, and can persist for up to fourteen months before additional applications are required. The immediate and long-lasting benefits of SC-55 make applications both economical and effective, as part of a successful agricultural program.

WHAT IS COMPACTION/HARDPAN?

Constant tillage, heavy traffic, lack of organic matter, chemical fertiliser residues and rainfall, all contribute to the formation of a compaction zone within the soil. Tillage will break up the natural soil aggregates into fine particles. These soil fines, work their way down to eventually form a tight and almost waterproof layer, or hardpan. Even in a non-till situation, that compaction layer will still form, for example, in a vineyard, where the soils between rows are often left undisturbed for many years, the hardpan can become even thicker.

WHAT ARE THE OBVIOUS SYMPTOMS OF SOIL COMPACTION?

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| • Water run-off/erosion. | • Slow nutrient uptake. | • Poor root development. |
| • Surface crusting. | • Hard to work (till) soil. | • Low production. |
| • Poor emergence. | • Little or no earthworm activity. | • Plant stress. |

WHAT CAN SC-55 DO TO RELIEVE THE PROBLEMS?

SC-55 has the ability to work down into soils with applied water and to assist that water to penetrate through the compaction zone to the sub-soil. SC-55 will increase the number and size of the micro-pore spaces (Air) within the soil including the compaction zone.

During wet seasons, SC-55 treated soils will absorb water more readily and therefore reduce erosion. During dry seasons the water that the SC-55 took down into the sub-soils can travel upwards to the root systems by capillary action, because pore spaces have been created by the SC-55 treatment. That capillary action can therefore relieve plant stress. SC-55 treated soils allow the roots to grow down into the compaction zone and this means healthier and stronger plants, that can produce more crop.

HOW DOES SC-55 WORK?

All agricultural soils contain colloids (soil fines) and colloids are strongly negatively charged. Colloids therefore, attract and hold all positively charged elements such as the hydrogen component of water. Colloids eventually become a major part of the compaction zone; consequently any applied water will become virtually locked in place at the zone. This will prevent any further applied water from soaking into the sub-soils. This phenomenon is called "soil bound water". When SC-55 is sprayed onto the soil it exchanges or frees the bound hydrogen and this in turn releases the colloid particles to move together, within the soil. The result is the creation of additional micropores (spaces) and those pores allow the water to move down by gravity into the soil below the compaction zone.

PACKAGING:



1 Lt



5 Lt



10 Lt



20 Lt



20 Lt



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