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## Specifications

# DIEHARD™ HUMATE SP

### Part 1: Product Description

DIEHARD™ Humate SP is potassium-sodium humate powder that acts a natural soil and plant growth stimulant. It is a dark brown to black powder with an 95% humic acid content. DIEHARD™ Humate SP is 100% soluble in water. It is easily assimilated by plants and some of its main functions include improving plant immunity, improving plant metabolism, improving plant root development, improving the supply of plant nutritional elements and increasing the formation of ferments. DIEHARD™ Humate SP promotes the increased accumulation of chlorophyll, sugar, amino acids and more and improves the efficiency of nitrogen utilization, allowing for reduced fertilizer rates. One of the primary actions of DIEHARD™ Humate SP is to increase the plant's ability to withstand the stresses of heat, drought, cold, disease, insect and other types of environmental or cultural pressures. DIEHARD™ Humate SP also increases general plant productivity, in terms of yield, as well as plant stem strength. Within the soil, DIEHARD™ Humate SP stimulates soil microorganisms, promoting Humus formation.

### Part 2: Product Specification

*Derived from Leonardine, 95% Humic Acid*

### Part 3: Application

#### Irrigation Applications

When making soil treatments through irrigation equipment, the total amount of DIEHARD™ HUMATE SP to be used should be thoroughly pre-mixed in a separate container before adding it to the final irrigation tank or system. DIEHARD™ HUMATE SP has a particle size ranging from 50-80 microns and will not block irrigation openings if it is properly pre-mixed with water. It is important to keep the final concentration of DIEHARD™ HUMATE SP to water being emitted to the soil within the parameters listed below. It may be necessary to adjust the irrigation system to deliver more or less water per acre per cycle to deliver the desired amount of DIEHARD™ HUMATE SP listed for the crop you are treating.

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*Technology Based \* Service Lead \* Customer Driven*

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## **Foliar Applications**

All crops will benefit from foliar applications of humic acids when it fits into the crop management practice. Foliar applications should be made to the soil treatments. Foliar applications should be made at the rate of 3 to 6 ounces of DIEHARD™ HUMATE SP per acre per treatment. Foliar treatments with DIEHARD™ HUMATE SP are strongly recommended during four growth stages of the crop: immediately before the appearance of buds, before blossoming, after the flowers have fallen, and during ripening. When soil treatments are not possible, foliar treatments may be made every 14 days using 3 ounces of DIEHARD™ HUMATE SP per acre. It is important to always use DIEHARD™ HUMATE SP within the concentration parameters listed below.

Maximum C Concentration - 1 ounce DIEHARD™ HUMATE SP per 5.5 gallons of water.

Optimal Concentration - 1 ounce DIEHARD™ HUMATE SP per 55 gallons of water.

Minimum Concentration - 1 ounce DIEHARD™ HUMATE SP per 110 gallons of water.

## **Part 4: Execution**

Use in accordance with approved submittal for each type of planting required in strict accordance with supplier's instructions and recommendations.

## **Part 5: Manufacturer's Service**

At the request of specifier provide the services of a qualified technical representative to instruct the user in proper mixing and handling of the product.

## **Part 6: Verification of Use**

At the request of the specifier invoices for purchases of product may be requested/required. Specifier shall require alternative procedures if product has not been used.

## **END OF SECTION**

### **Free of Charge Services Provided to Specifiers**

We do a take off for you - fax your plant list to us and we will do a take off and fax back to you the amount of materials required for the job.



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We introduce your contractors to our products - give us a list of your contractors and we will introduce, educate and provide them with installation information and list of materials for the job.

With toll-free phones and fax lines we are at your service at a moment's notice.

We can provide verification to you that the contractor has purchased products.