



DeSpark Liquid Chemical Analysis

This information is a summary of analysis of data from numerous different analyses of DeSpark Liquid.

DeSparkLiquid is a natural product, produced using natural methods. Because of this, some natural variations exist from batch to batch. Even recognizing this, it appears that in most cases, the testing variation between tests is greater than the variations.

In a material with complex matrix as DeSpark Liquid, accurate testing can be difficult, and establishing and determining proper testing protocols can be difficult. For example, "shadowing effect" can be particularly difficult to deal with.

This document is subject to change without notice.

ELEMENTS: Listed in order of prominence.

Label claim will be ½ teaspoon.

Manufacturer test each batch for magnesium, sodium, potassium, chloride, sulfate, lithium, and boron.

Chloride

Label claim: 700 mg. 62% DV (Daily Value).

Magnesium

Label claim: 250 mg. Each batch is tested twice for magnesium. On average, most test results vary between 225 mg. and 285 mg. Any harvest batch with two separate tests below 250 mg. or one result below 225 mg. is blended with another to standardize at 250 mg. or above.

Sulfur (as sulfate):

Label claim: 55 mg. Sulfate. Need in human nutrition has been established, but no US daily values have been established. Test results vary from 50 mg. to 103 mg. The average is 78 mg.

Sodium:

Label claim: 9 mg., and "low sodium." US Food and Drug regulation allows a food to be labeled as "sodium free" if it contains less than 5 mg. sodium per labeled serving size, and "low sodium" if it contains 140 mg. or less sodium per serving size and per 50 grams. (Fifty grams is about eight teaspoons of DeSpark Liquid.) The preponderance of tests indicates that sodium is generally in the 1 - 4 mg. range. When multiple tests indicate sodium in a particular batch to be above 7 mg. that batch is blended down to lower sodium levels or is used in manufacture of products where higher sodium levels is not a problem. Manufacturer carefully consider all people who may have high blood pressure due to their daily intake of excess sodium since we are not going to take risks when it comes to the safety of the public we serve. Manufacturer can't control people and their use of the incorrect salts (refined, and missing vital components) or their intake of them.

Potassium:

Label claim: 5 mg. US Daily Reference Value (DRV) based on a 2000 calorie diet is 3500 mg. Anything under 35 mg. represents less than 1% of DRV and is not considered significant. Analysis results vary between 1 and 15 mg.

Lithium

Label claim: 1.5 mg. No US daily values have been set. Test results average between 1.4 and 2.5 mg.



Boron:

Label claim: 1 mg. No US daily values have been set. Test results average between 1 and 2 mg.

Manufacturer test our vats regularly for a broad spectrum of contaminants, including testing during every major harvest period. Contaminant tests include organic and petroleum chemicals, agricultural chemicals and pesticides, and heavy metals. Heavy metal testing also provides some data on additional elements. Complete spectrum element testing is done periodically, and has been done using a number of different methodologies.

Following is a list of those elements that have been found in DeSpark Liquid, in approximate descending order. (This order is approximate because not all labs agree, even on identical samples from the same batch, and because there could also possibly be some natural variation from harvest batch to harvest batch).

When reporting test results, most labs commonly use the term "less than" or some variation of "less than"<, dl, etc) to indicate the element was not detected or was clearly not readable. When this term is used, it means the element may or may not be present at all, and if present, is less than the detection limit for that element. The following list does not include any element listing "less than", "<", "dl" etc. unless at least one lab clearly indicates that the element was actually detected. The following is micrograms per milaleter. (1 US fluid ounce = 29.5735296 ml if you wish to convert this).

Cl – Chloride 264-350
Mg – Magnesium 101.5-110
S04 - Sulfur as total sulfate 16.5-35
Na – Sodium <4
K – Potassium 1.25-2.5
Li – Lithium 0.6-0.775
Br – Bromide <10
B – Boron .420-.650
Ca – Calcium <50
HC03 - Carbon as total Carbonate <500ppm
F – Fluoride <100
I– Iodide <25
Si – Silicon <5
N – Nitrogen
Se – Selenium <2
P – Phosphorus <10
Cr – Chromium <1
Ti – Titanium <1
Rb – Rubidium <2
Co – Cobalt <1
Cu – Copper <1
Fe – Iron <31
Mn – Manganese <5
Sb – Antimony <3.5
As – Arsenic <10 ppm
Mo – Molybdenum <1
Sr – Strontium <2
Zn – Zinc <1
Ni – Nickel <2



W – Tungsten <2
Ge – Germanium <0.7
Pb - Lead - - Less Than <0.5 ppm*
Al - Aluminum - - Less Than <1
Sc – Scandium <0.02
Sn – Tin <1
La – Lanthanum <3.5
Y – Yttrium <0.5
Ba – Barium <.5
Ag – Silver <0.4
Cd - Cadmium - - - Less Than <0.2ppm*
U – Uranium 0
Ga – Gallium <0.5
Zr – Zirconium <0.1
V – Vanadium <0.4
Be – Beryllium <0.5
Te – Tellurium <0.1
Bi – Bismuth <3.5
Hf – Hafnium <0.4
Tb – Terbium <0.1
Eu – Europium <0.5
Gd – Gadolinium <0.5
Sm – Samarium <0.2
Dy – Dysprosium <0.5
Ho – Holmium <0.4
Lu – Lutetium <0.4
Tm – Thulium <0.3
Er – Erbium <0.5
Yb – Ytterbium <0.5
Nd – Neodymium <0.5
Pr – Praseodymium <0.5
Nb – Niobium <2
Ta – Tantalum <0.02
Ce – Cerium <1
Cs – Cesium <.1
Au – Gold <0.35
Hg - Mercury - - - Less Than <0.1 ppm*

Plus the six Nobel Gasses, which have never been tested for, but are present in sea water and are presumed present, plus of course, Hydrogen and Oxygen as H₂O.

*Each batch is tested for heavy metals at an independent lab using EPA approved methods. In every single test run since beginning this program of testing, lead, aluminum, cadmium and mercury have been below the amounts listed.