

**WATER QUALITY TESTING SUMMARY FOR PRAIRIE SHEPHERD WOOL PRODUCTS**  
**Testing Done By the Plant, Water, and Soil Laboratory at Colorado State University, January 2016**

**Warm tap water:**

**COMMENTS:**

The pH, sulfate, alkalinity and total dissolved solids exceed the EPA suggested limits for domestic use. Sodium exceeds the EPA drinking water health advisory limit for domestic use. The EPA has not set a maximum contaminant level (MCL) for sodium in municipal water supplies where it is required to have sodium below a legal limit. They have determined that there may be a health issue for individuals on sodium restricted diets if the sodium level exceeds 20 ppm.

This water is satisfactory for all classes of livestock and poultry. It may cause mild, temporary diarrhea in livestock and watery droppings in poultry not accustomed to the salt content.

This water is classified as a high salinity, high sodium irrigation water and would not be suitable for irrigation purposes. Soils irrigated with this water will accumulate salts, in particular sodium, which would eventually be detrimental to plants.

**Standard wool wash:**

**COMMENTS:**

Sulfate, alkalinity, total dissolved solids, manganese, cadmium and chromium exceed the EPA suggested limits for domestic use. Sodium exceeds the EPA drinking water health advisory limit for domestic use. The EPA has not set a maximum contaminant level (MCL) for sodium in municipal water supplies where it is required to have sodium below a legal limit. They have determined that there may be a health issue for individuals on sodium restricted diets if the sodium level exceeds 20 ppm.

This water is satisfactory for livestock use but may cause temporary diarrhea or be refused at first by animals not accustomed to the salt content. It is poor water to use for poultry and can cause watery feces, increased mortality and poor growth, especially in turkeys.

This is very poor quality water and should not be used for irrigation.

**Greener Shades brand acid dye, aqua:**

**COMMENTS:**

The pH, sulfate, alkalinity, total dissolved solids, aluminum and manganese exceed the EPA suggested limits for domestic use. Sodium exceeds the EPA drinking water health advisory limit for domestic use. The EPA has not set a maximum contaminant level (MCL) for sodium in municipal water supplies where it is required to have sodium below a legal limit. They have determined that there may be a health issue for individuals on sodium restricted diets if the sodium level exceeds 20 ppm.

This water is satisfactory for all classes of livestock and poultry. It may cause mild, temporary diarrhea in livestock and watery droppings in poultry not accustomed to the salt content.

This water is classified as a high salinity, high sodium irrigation water and would not be suitable for irrigation purposes. Soils irrigated with this water will accumulate salts, in particular sodium, which would eventually be detrimental to plants.

### **Alum mordant exhaust:**

#### **COMMENTS:**

The pH, sulfate, total dissolved solids, aluminum, iron, manganese and zinc exceed the EPA suggested limits for domestic use. Sodium exceeds the EPA drinking water health advisory limit for domestic use. The EPA has not set a maximum contaminant level (MCL) for sodium in municipal water supplies where it is required to have sodium below a legal limit. They have determined that there may be a health issue for individuals on sodium restricted diets if the sodium level exceeds 20 ppm.

This water can be used with reasonable safety for dairy and beef cattle, sheep, swine, and horses. Its use should be avoided for pregnant or lactating animals. This is not acceptable water for poultry. This is very poor quality water and should not be used for irrigation.

### **Saxon blue exhaust:**

#### **COMMENTS:**

The pH, sulfate, alkalinity, total dissolved solids, aluminum, iron, manganese and cadmium exceed the EPA suggested limits for domestic use. Sodium exceeds the EPA drinking water health advisory limit for domestic use. The EPA has not set a maximum contaminant level (MCL) for sodium in municipal water supplies where it is required to have sodium below a legal limit. They have determined that there may be a health issue for individuals on sodium restricted diets if the sodium level exceeds 20 ppm.

This water is satisfactory for livestock use but may cause temporary diarrhea or be refused at first by animals not accustomed to the salt content. It is poor water to use for poultry and can cause watery feces, increased mortality and poor growth, especially in turkeys.

This water is classified as a medium salinity water, however the sodium is very high making the water unsuitable for irrigation.