



# GUNTHER SALT COMPANY

Supplying Quality Salt Products Since 1902

## Bulk White Crystal Coarse Southern Rock Salt

### DESCRIPTION

White Crystal Coarse Southern Rock Salt is direct-mined production of mineral Sodium Chloride. Coarse screening is the mid-sized screenings of the three coarse grade rock salt screenings. The other two, Medium and Extra Coarse, are also available. This product is produced from underground dome-shaped salt deposits by blasting with explosives, followed by crushing and screening operations. There are no additives.

Crushed Southern rock salt particles are multifaceted and somewhat rectangular in shape. The appearance is translucent to white with a variable incidence of small red, black, or yellow specks or streaks which are attributed to metallic oxide and sulfide impurities, mineral carnallite and traces of hydrocarbons.

### CHEMICAL PROPERTIES

Southern rock salt contains in excess of 20 elemental impurities, but routine standard salt analysis measures only calcium, magnesium, sulfate, water insolubles, and iron. The major impurity is anhydrite, the anhydrous form of calcium sulfate. Anhydrite is very slow dissolving, tending to accumulate as a gritty, sandy residue in bedded, downflow brinemaking systems. A portion of the anhydrite will be assayed as water insolubles. The true water insolubles present consist of traces of silica, red sandstone, dolomite (CaMg(CO<sub>3</sub>)<sub>2</sub>), iron sulfides and oxides, and various heavy metal compounds. Hydrocarbons are also found in variable quantities of up to about 150 ppm; and potassium chloride is present in levels of less than 200 ppm. Ammonia (<10 ppm) and nitrates (<50 ppm) are contributed by explosives.

*These data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use of our products are beyond our control. We recommend that the prospective user determines the suitability of our material and suggestions before adopting them on a commercial scale.*

### CHEMICAL ANALYSIS

	Typical	Range
<sup>1</sup> Sodium Chloride (%)	98.6	>97.9
Calcium Sulfate (%)	1.18	<2.2
<sup>2</sup> Other Salts (%)	0.20	<0.40
Magnesium (ppm)	19	<60
Ca/Mg as CA (%)	0.35	<0.65
<sup>3</sup> Moisture (Surface) (%)	0.5	<2.8
Water Insolubles (%)	0.04	<0.2
Copper (ppm)	0.1	<0.5
Iron (ppm)	1.7	<10

<sup>1</sup> By difference of impurities, moisture-free basis (ASTM); includes traces of KCL (0.02%)

<sup>2</sup> Includes one or more of the following — CaCl<sub>2</sub>, MgSO<sub>4</sub>, NaSO<sub>4</sub>

<sup>3</sup> At the mine

### PHYSICAL PROPERTIES

Pour (loose) bulk density is 1.03 - 1.28 g/ml (60 -80 lb/ft<sup>3</sup>).

### SIEVE ANALYSIS

U.S.S. Mesh	Opening Millimeters	Percent Retained Coarse	
		Typical	Range
0.53"	13.2	-	<3
3/8"	9.5	0	
0.265"	6.7	6	-
4	4.75	29	
6	3.35	29	
8	2.36	16	
12	1.70	8	<45
16	1.18	5	
30	0.60	-	
Pan	-	7	

### MINE

Weeks, Louisiana

### STOCK PILES

St. Louis, Missouri

### MATERIAL CODE

F144890000Z