

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
AC Teat Dust	60	0.96
Accelerator	31	0.5
Acetate	35	0.56
Acetate Flakes	21	0.34
Acini Pepe	53.6	0.86
Acrawax	15	0.24
Acrawax & Carbon Black	34	0.54
Acrawax C	32	0.51
"Acrylic Concentrate Pellets, 1/8"" "	38	0.61
Acrylic Fibers	9	0.14
"Acrylic Pellets, 1/8"""	38	0.61
"Acrylic Resin, Powder"	32	0.51
Activated Aluminum	15	0.24
Activated Carbon	20	0.32
Adipic Acid	40	0.64
Aero-Cil	8	0.13
Alcanol	39	0.62
Alfalfa Leaf Meal	14.5	0.23
"Alfalfa Meal, Dehyd., 13%"	16-18	0.26-0.29
"Alfalfa Meal, Dehyd., 17%"	18-22	0.29-0.35
"Alfalfa Meal, Fine Ground"	15-22	0.24-0.35
"Alfalfa Meal, Suncured, 13%"	14	0.22
"Alfalfa Pellets, 13%"	41-43	0.66-0.69
"Alfalfa Pellets, 17%"	41-43	0.66-0.69
Alfalfa Seed	45-48	0.72-0.77
Alfalfa Stem Meal	12	0.19
Almonds	29	0.46
Alodine 12005	79	1.27
Alodine No. 41	92	1.47
Alum	50	0.8
Alum/Pigment Mix	30	0.48
Alumina	40	0.64
Alumina & Lime Mix	65	1.04
Alumina Hydrate	68	1.09
Alumina Powder	18	0.29

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Alumina Precipitator Dust	54	0.86
"Alumina, Activated"	48	0.77
"Alumina, Alcan"	46	0.74
"Alumina, Calcined"	63	1.01
"Alumina, Corhart"	83	1.33
"Alumina, FAH-KDH"	45	0.72
"Alumina, Kyanite"	77	1.23
"Alumina, Metal Grade"	67	1.07
"Alumina, Reacted"	65	1.04
"Alumina, Sandy"	60	0.96
"Alumina, Tabular Dust"	21	0.34
Aluminum Benzoate	11	0.18
Aluminum Chloride	51	0.82
Aluminum Chlorohydrate	55	0.88
Aluminum Dross	81	1.3
Aluminum Etchant	55	0.88
Aluminum Filament 200X	75	1.2
Aluminum Flakes	150	2.4
Aluminum Fluoride	55	0.88
Aluminum Hydroxide	25.6	0.41
Aluminum Magnesium Silicate	21	0.34
Aluminum Nitrate	45-62	0.72-0.99
Aluminum Oxide	80	1.28
"Aluminum Oxide, Calcined"	33	0.53
Aluminum Powder	44	0.7
Aluminum Silicate	33	0.53
"Aluminum Silicate, Catalyst"	53	0.85
Aluminum Sulfate	65	1.04
"Aluminum Sulfate, Ground"	50	0.8
Aluminum Trihydrate	45	0.72
"Aluminum Wire, Chopped"	35	0.56
Ammonium Bromide	76	1.22
Ammonium Chloride	38	0.61
Ammonium Nitrate	49	0.78
"Ammonium Nitrate, Prills"	38	0.61
Ammonium Perchlorate	62	0.99
Ammonium Phosphate	55	0.88
Ammonium Sulfate	69	1.11
Amorphous Silica	11	0.18

What is bulk density? In simplistic terms it's defined as the mass per unit volume of powders or granules in a bulk state. When you're handling solids or powders, a bulk material's weight in lb./ft<sup>3</sup> or g/cm<sup>3</sup> is often an important number. Processors often have the weights of the materials they handle memorized.

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Anthracite Powder	35	0.56
Antimony Oxide	44	0.7
Antioxidant Granules	41	0.66
Antioxidant Powder	28	0.45
"Apple Slices, Dry "	15	0.24
Aqua Nuchar	10	0.16
Aquafloc	10	0.16
Arasan	25	0.4
Arsenic Trioxide	41	0.66
Asbestos	22	0.35
Asbestos Fiber	20	0.32
"Asbestos Fiber, Long "	16	0.26
"Asbestos Fiber, Short "	19	0.3
Asbestos Powder	1,748	28
Asbestos Shorts	1,623	26
"Ascorbic Acid, Coarse "	2,809	45
"Ascorbic Acid, Fine "	1,998	32
"Ash, Ground "	105	1.68
"Ashes, Dry, Loose "	38	0.61
"Ashes, Wet, Loose "	47	0.75
Ashes, Coal, Dry	35-45	0.56-0.72
Ashes, Coal, Wet	45-50	0.72-0.8
Asphalt Binder	80-85	1.28-1.36
Asphalt, Crushed, -1/2"	45	0.72
Atrazine (Herbicide)	30	0.48
Attapulgate	40	0.64
Attasorb	18	0.29
Atticote	22	0.35
Baking Powder	56	0.9
Baking Soda (Sodium Bicarbonate)	50	0.8
Barbasco Root	33	0.53
Barite	120	1.92
Barium Carbonate	55	0.88
Barium Oxide	63	1.01
Barium Stearate	13	0.21
Barium Sulfate	60	0.96
Bark, Wood, Refuse	10.0-12.0	0.16-0.19
Barley Meal	28	0.45

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
"Barley, Fine Ground"	46	0.74
"Barley, Ground"	24-26	0.38-0.42
"Barley, Malted"	30.5	0.49
"Barley, Rolled"	21-24	0.34-0.38
"Barley, Scoured"	41	0.66
"Barley, Whole"	38-43	0.61-0.69
Basalt	80-105	1.28-1.68
Bauxite	45	0.72
Bauxite, Dry, Ground	68	1.09
Bauxite, Mine Run	66-90	1.06-1.44
Beans, Castor, Whole Shelled	36	0.58
Beans, Castor, Meal	35-40	0.56-0.64
Beans, Navy, Dry	48	0.77
Beans, Navy, Steeped	60	0.961
"Beans, White"	43-48	0.69-0.77
Beet Pulp	16-20	0.26-0.32
Bentonite	50	0.8
"Bentonite, Coarse"	60	0.96
Benzene Hexachloride	56	0.9
Benzion	34.4	0.55
Bicarbonate of Soda	62	0.99
Binder 812	41	0.66
Binder Starch	41	0.66
"Binder, T-Gel"	31	0.5
Biscuit Pre-Mix	60	0.96
Bisphenol	37	0.59
Bisphenol Flakes	60	0.96
Black Coloring	30	0.48
Bleach Compound	60	0.96
Blood Flour	30	0.48
Blood Meal	38.5	0.62
"Bone & Meat Meal, Loose"	45	0.72
"Bone Meal, Loose"	50-60	0.80-0.96
"Bone, Ground"	50	0.8

# DIGITALLY TRANSFORM bulk material inventory



BinMaster sensors measure material in silos, bins, and tanks. BinCloud shows material levels for solids or liquids of any bulk density or specific gravity.

Sensors & software bring multiple silos, multiple locations, to one BinCloud app. Get your free quote today.

800-278-4241 | [www.binmaster.com](http://www.binmaster.com)

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
"Bone, Ground, Dry"	75	1.2
Borate of Lime	60	0.96
Borax	60	0.96
Borax Granules	60	0.96
"Borax, Puffed"	12	0.19
Boric Acid	54	0.86
Boric Acid	63.2	1.01
Boron	75	1.2
Boron Carbide	48	0.77
Brake Lining Compound	30	0.48
Bran	35	0.56
Brass Powder	100	1.6
Bread Crumbs	6	0.1
Brewers Grain, Spent, Dry	14-30	0.22-0.48
Brewers Grain, Spent, Wet	55-60	0.88-0.96
Brick, Hard Burned	125	2
Brick, Soft Burned	100	1.6
Bromo Seltzer	38	0.61
Bronze Powder	78	1.25
Broom Corn Seed	41.8	0.67
Brown Gravy Mix	38	0.61
Brown Whey Powder	29.6	0.47
Buckwheat Bran	15.5	0.25
Buckwheat Flour	41	0.66
Buckwheat Hulls	13	0.21
Buckwheat Middlings	22	0.35
"Buckwheat, Whole"	37-41	0.59-0.66
"Buttermilk, Dry"	31	0.5
Cake Mix	44	0.7
Cal. Chloro Fluoro Phosphate	53	0.85
Calcine, Flour	75-85	1.2-1.36
Calcium Acetate	125	2
Calcium	30	0.48
Calcium Borate	61	0.98
"Calcium Carbide, Crushed"	80	1.28
Calcium Carbonate	44	0.7
Calcium Chloride	60	0.96
Calcium Fluoride	102	1.63

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Calcium Hydroxide	40	0.64
Calcium Lactate	26-29	0.42-0.46
Calcium Phosphate	48	0.77
Calcium Silicate	10	0.16
Calcium Stearate	20	0.32
Calcium Sulfate	45	0.72
Cane Seed	41	0.66
"Carbofrax, C-4"	100	1.6
Carbon Black	35	0.56
Carbon Black	24.8	0.4
Carbon Black & Graphite	45	0.72
Carbon Black (Nuchar®)	11	0.18
Carbon Black Mix	77	1.23
"Carbon Black, Beads"	19	0.3
"Carbon Black, Pellets"	22	0.35
Carbon Dust	38	0.61
Carbon Flour	57	0.91
Carbon Granules	59	0.95
Carbon Lampblack	8	0.13
Carbon Masterbatch	41	0.66
Carbon Pellets	42	0.67
"Carbon, Activated"	17	0.27
"Carbon, Crystallized"	58	0.93
Carbon-Teflon Mix	32	0.51
Casein	36	0.58
Cashews	31	0.5
Cast Iron, Chips	130-200	2.08-3.2
Casting Mix	150	2.4
Catalyst Beads	50	0.8
"Catalyst, Synthetic"	39	0.62
"Catalyst, Zeolitic"	45	0.72
Caustic Potash Beads	65	1.04
Caustic Soda	31	0.5
Celaflock	11	0.18
Celaton FP4	14	0.22
Celcon Flakes	23	0.37
Celcon Pellets	50	0.8
Celite	10	0.16
Celite 535	10	0.16
Cellflo	12	0.19

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Cellulose Acetate	10	0.16
Cellulose Dervative	45	0.72
Cellulose Floc	22	0.35
Cellulose Gum	27	0.43
Cement	85	1.36
Cement Dust	50	0.8
"Cement, C-10 Sealing"	56	0.9
"Cement, Portland"	94	1.51
"Cement, Portland Clinker"	95	1.52
"Cement, Root Canal"	67	1.07
Cennum Oxide	62	0.99
Ceramic Compound	85	1.36
Ceramitalc	54	0.86
Cereal Mix	43	0.69
Chalk, Crushed	75-95	1.2-1.52
Charcoal Powder	24	0.38
Chemco Burnishing Compound	35	0.56
Chickory	34	0.54
Chickory Powder	30	0.48
Chili Spice	45	0.72
Chlorine Compound	28	0.45
Chlorine Powder	36	0.58
Chocolate Drink Mix	26	0.42
Chopped Hose (Cheerios®)	50	0.8
"Chromic Acid, Powder"	100	1.6
"Cinders, Blast Furnace"	57	0.91
"Cinders, Coal, Ashes & Clinker"	40	0.64
Cinnamon Powder	35	0.56
Citric Acid	48	0.77
"Citrus Pulp, Dry"	20.5	0.33
Clay	50	0.8
Clay & Petro Ag	55	0.88
Clay Product	33	0.53
"Clay, Bentonite"	50	0.8
"Clay, Calcined"	30	0.48
"Clay, Fine"	62	0.99
"Clay, Fines"	70	1.12
"Clay, Georgia"	65	1.04
"Clay, Granite"	32	0.51
"Clay, Helium"	36	0.58
"Clay, Kaolin"	48	0.77

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
"Clay, Pure"	60	0.96
"Clay, Super White"	30	0.48
"Clay, Talc"	52	0.83
Clay-Talc-Flint	62	0.99
Claytone 40	32	0.51
Claytones ING 400	28	0.45
Clearon® Powder	40	0.64
Clinker Dust	94	1.51
Clover Seed	48	0.77
CMC Powder	52	0.83
Coagulant	36	0.58
Coal Anthracity	55-60	0.88-0.96
Coal Dust	35	0.56
Coal Granules	52	0.83
Coal Powder	40	0.64
"Coal Powder, MRD"	41	0.66
"Coal Powder, SRC"	39	0.62
"Coal, Bituminous"	52	0.83
"Coal, Pulverized"	38	0.61
Coal-trol M	42	0.67
Cobalt Carbonate	60	0.96
Cobalt Fines	256	4.1
"Cobalt Oxide, 10% Moisture"	114	1.83
Cobalt Sulfate	48	0.77
Cocoa	35	0.56
Cocoa Flavoring	55	0.88
Cocoa Puffs Cereal	10.4	0.17
Cocoa Shells	30	0.48
Coconut Chips	38	0.61
"Coffee Beans, Green"	37-39	0.59-0.62
"Coffee Beans, Roasted"	22-24	0.35-0.38
Coffee Flavoring	28	0.45
"Coffee, Instant"	19	0.3
Coke Breeze	30-34	0.48-0.54
Coke Dust	15	0.24
Coke Fines	39	0.62
Coke Granules	52	0.83
"Coke, Average Lump"	28-32	0.45-

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
		0.51
"Coke, Calcined, Coarse"	56	0.9
"Coke, Calcined, Fines"	59	0.95
"Coke, Calcined, Intermediate"	59	0.95
"Coke, Petroleum CRS 393"	48	0.77
"Coke, Petroleum Lump"	40-50	0.64-0.80
"Coke, Pulverized"	45	0.72
Colemanite	57	0.91
Colloidal Lime	49	0.78
Collupulin	19	0.3
Compost	30-50	0.48-0.8
Concrete, Cinder	90-100	1.44-1.6
Concrete, 2 Inch Slump	100-150	1.6-2.4
Concrete, 6 Inch Slump	110-150	1.76-2.4
Concrete, Pre-Mix Dry	85-120	1.36-1.92
Cookie Meal	38	0.61
Copolymer Beads	41	0.66
Copolymer Flakes	23	0.37
Copper Hydroxide	25	0.4
Copper Ore	120-150	1.92-2.4
"Copper Phosphorus, Pellets"	265	4.24
Copper Sulfate	52	0.83
"Copper, Fines"	101	1.62
"Copper, Flotation"	35	0.56
"Copper, Pellets, 1/32""	240	3.84
"Copra Meal, Loose"	27	0.43
"Cork, Ground"	4.0-5.0	0.06-0.08
"Cork, In Bales"	8.0-9.0	0.13-0.14
"Cork, Solid"	15	0.24
Corn Bran	13	0.21
"Corn Chops, Coarse"	40-44	0.64-0.70
"Corn Chops, Fine"	36-39	0.58-0.62
"Corn Chops, Medium"	38-42	0.61-0.67
Corn Cobs	17	0.27
Corn Distillers Dry Grains	18.5	0.3

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Corn Distillers Dry Solubles	25.5	0.41
Corn Flour	51	0.82
Corn Germ Meal	35	0.56
Corn Gluten Feed	26-33	0.40-0.53
Corn Gluten Meal	32-43	0.51-0.69
Corn Grits	40-43	0.64-0.69
Corn Mash	45	0.72
Corn Meal	40	0.64
Corn Oil Meal	33-36	0.53-0.58
Corn Starch	42	0.67
Corn Sugar	20.5	0.33
"Corn, Cracked, Coarse"	40	0.64
"Corn, Ear"	56	0.9
"Corn, Ground"	34-36	0.54-0.58
"Corn, Hominy Feed"	25-28	0.40-0.45
"Corn, Kibbled"	20-22	0.32-0.35
"Corn, Whole, Shelled"	45	0.72
Cottonseed Cake	40-45	0.64-0.72
Cottonseed Flour	56	0.9
Cottonseed Hulls	12	0.19
Cottonseed Meats	40	0.64
"Cottonseed, Delinted"	25-35	0.40-0.56
"Cottonseed, w/Lint"	18-25	0.29-0.40
Cryolite	86	1.38
Crystal Flo	67	1.07
"Cullet, Glass, 3/4""	80-90	1.28-1.44
"Cullet, Glass, Average"	85-100	1.36-1.60
Cupric Oxide	110	1.76
Curly Wide Noodles	20	0.32
Dacron Flakes	32	0.51
Dairy Flavoring	38	0.61
Deflourinated Phosphate	97	1.55



## RADAR SENSORS

BinMaster family of non-contact radar level sensors provides continuous level measurement in solids, powders, and liquids. From [top-of-the line NCR-80 radars](#), top, to the accuracy of the [compact radars](#), left, BinMaster brings the best options in the business.



LET'S TALK

LET'S TALK

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Delsan	27	0.43
Dental Plaster	42	0.67
Detergent Flakes	32	0.51
Detergent Powder	38	0.61
Dextrose	36	0.58
Diammonium Phosphate	50	0.8
Diatomaceous Earth	16	0.26
Diatomaceous Earth Product	14	0.22
"Diatomaceous Earth, Calcined"	10	0.16
"Diatomaceous Earth, Celite"	15	0.24
"Diatomaceous Earth, Dicalite"	11	0.18
"Diatomaceous Earth, Fibra-Flo"	15	0.24
"Diatomaceous Earth, Filtrol"	14	0.22
"Diatomaceous Earth, Microcel"	9.0-12.0	0.14-0.19
"Diatomaceous Earth, Perlite"	5	0.08
"Diatomaceous Earth, Supercel"	10	0.16
Diatomite	14	0.22
Dicalcium Phosphate	45-50	0.72-0.8
Dicalite	12	0.19
Dielectric Compound	45	0.72
Distillers Grains	18	0.29
Disodium Phosphate	25-31	0.4-0.5
Dog Food Blend	54	0.86
Dog Food Mixture	36	0.58
Dolomite	54	0.86
Dolomite Lime	46	0.74
Donut Mix	40	0.64
Dough Mix	37	0.59
"Duramite, Calcium Carb."	58	0.93
"Dye, Fabric"	25	0.4
"Dye, Food"	40	0.64
"Earth, Common Loam, Dry"	73	1.17
"Earth, Common Loam, Moist"	76	1.22
Ebonite, Crushed	65-70	1.04-1.12
"Egg Yokes, Powdered"	23	0.37
"Eggs, Powdered"	22	0.35
Elbow Macaroni	32.8	0.53
Electrolyte	60	0.96
Emery	230	3.68

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
"Epoxy Molding, Preblend"	50	0.8
Epoxy Powder	49	0.78
Epsom Salts	40-50	0.64-0.8
Explosive Compound	36	0.58
Extrude Re grind	39	0.62
Fanna	45	0.72
Feldspar	62	0.99
Feldspar, Ground	65-80	1.04-1.28
Feldspar, Lumps	90-100	1.44-1.6
Fermate	15	0.24
Ferric Chloride	43	0.69
Ferric Sulfate	61	0.98
Ferro Silicate	78	1.25
Ferro Silicon	87	1.39
Ferrous Carbonate	85-90	1.36-1.44
Ferrous Sulfate	60-70	0.96-1.12
Ferrous Sulfide, Powder	105-120	1.68-1.92
Fertilizer	37	0.59
Fiberglass	22	0.35
"Fiberglass, 1/2"" Chop"	17	0.27
"Fiberglass, 1/4"" Chop"	18	0.29
"Fiberglass, 1/8"" Chop"	20	0.32
"Fiberglass, Pellet Blend"	22	0.35
"Fiberglass, Powder Blend"	30	0.48
"Filter Cake, Centifuge"	40	0.64
Filter-Cel	9	0.14
Filtrol	30	0.48
Filtrol Clay Grade 105	50	0.8
Fine Powder	127	2.03
Fire Soot	64	1.03
Fireclay	72	1.15
Firemate	24	0.38
Fish Meal	30-47	0.48-0.75
Flame Retardant	38	0.61
Flaxseed	43.5	0.7
Flint	97	1.55
Floc	13	0.21

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
"Floc, Solka"	9	0.14
Flour	48	0.77
"Flour, Barley"	38	0.61
"Flour, Barley Malt"	45	0.72
"Flour, Corn"	39	0.62
"Flour, Rye"	42	0.67
"Flour, Soybean"	44	0.7
"Flour, Wheat"	42	0.67
Flue Dust	54	0.86
Fluorescent Powder	68	1.09
"Fluorescent Powder, Moist"	84	1.35
Fluoride Compound	42	0.67
Fluorite	78	1.25
Fluorspar	100-125	1.60-2.00
Flux	145	2.32
Flux Fines	100	1.6
Fly Ash	65	1.04
Food Coloring	39	0.62
Foundry Additive Mixture	80	1.28
Foundry Premix	40	0.64
Frodex 24	38	0.61
Frosting Mix	38	0.61
Fuel Additives	30	0.48
Fuel Treatment	40	0.64
Fuller's Earth	35	0.56
"Fuller's Earth, Rods"	43	0.69
Fumaric Acid	40	0.64
Fungicide	26	0.42
Garlic Flakes	22	0.35
Garlic Powder	20	0.32
Gelatin	45	0.72
Geon Resin	22	0.35
Gilsonite Fines	49	0.78
Gilsonite resin	42.4	0.68
Glass Batch Material	90-110	1.44-1.76
"Glass Batch, Mix"	87	1.39
Glass Beads	100	1.6
Glass Frit	144	2.31
Glass Microspheres	62	0.99

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Glass Powder	103	1.65
"Glass, Ground"	103	1.65
Glitter Flakes	32	0.51
Glue	53	0.85
Gluten Meal	40	0.64
"Glycerine, Green Catalyst"	42	0.67
Gold Powder	53	0.85
Goulac	30	0.48
Graham Cracker Crust	15	0.24
Grain	36	0.58
"Granite, Crushed"	97	1.55
Granodine 663	68	1.09
Granular Material	48	0.77
Granular Powder Coal	48.8	0.78
Grape Pomace	15-20	0.24-0.32
Graphite	48	0.77
Graphite Flakes	42	0.67
Graphite Granules	68	1.09
Graphite Powder	35	0.56
"Graphite, Pulverized"	22	0.35
"Graphite, Scrap"	59	0.95
Grass Seed	44	0.7
Gravel	110	1.76
Green Split Peas	56.8	0.91
Grinding Compound	99	1.59
Ground Oat Hulls	34.4	0.55
Grout	70	1.12
"Gum, Base"	42	0.67
"Gum, Granules"	36	0.58
"Gum, Resin"	32	0.51
Guano, Dry	70	1.12
Gypsum	54	0.86
Gypsum Stucco	50	0.8
"Gypsum, Calcined"	55	0.88
"Gypsum, Ground"	42	0.67
Halon	22	0.35
Hampseed	35.3	0.56
Hash Spice	66	1.06
"Hazel Nuts, Peanuts, Almonds"	39.2	0.63
Hell Blue Dye	19	0.3

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Hexahicel	32	0.51
Hexa-Melamine	33	0.53
Hexamine	42	0.67
Hexa-Silene	30	0.48
Hisil	11	0.18
Hominy, Dry	37	0.59
Hops, Spent, Dry	37	0.59
Hops, Spent, Wet	50-55	0.8-0.88
Honey Nut Cheerios Cereal	10.4	0.17
HydraFlakes	36	0.58
Hydrocarbon Compound	36	0.58
Hydrocide	90	1.44
"Hyvar X, Herbicide"	25	0.4
"Ice, Crushed"	35-45	0.56-0.72
Ilmenite	35	0.56
Inhibitor Compound	44	0.7
Insecticide	30	0.48
Iodized Mixture	18	0.29
Ional	49	0.78
Irganox	17	0.27
Iron Chromite	114	1.83
Iron Filings	180	2.88
Iron Ore	162	2.59
Iron Oxide	80	1.28
"Iron Oxide, Black"	161	2.58
"Iron Oxide, Red"	69	1.11
Iron Powder	175	2.8
Iron Sulfate	80	1.28
Isophthalic Acid	46	0.74
Jebfil 88	127.2	2.04
"Kafir and Milo, Grain Sorghum"	40-46	0.64-.074
Kaolin	49	0.78
Kaolin Clay	50	0.8
Karaya Gum	45	0.72
Ken-L-Biskit	30	0.48
Ken-L-Meal	33	0.53
Kiln Feed Mix	73	1.17
Kix Mixture	48	0.77
Kohinor	49	0.78

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Krallex Powder	42	0.67
Lactose	32	0.51
Lamisay Flour	34	0.54
Lampblack	44	0.7
Latex Powder	89	1.43
Latikia	35	0.56
Lead Arsenate	90	1.44
Lead Carbonate	81	1.3
Lead Chloride Crystals	72	1.15
Lead Oxide	63	1.01
Lead Stabilizer	43	0.69
Lead Sulfide, 100 Mesh	240-260	3.84-4.16
Licorice Powder	28	0.45
Ligno Sulfinat	30	0.48
Lignone	36	0.58
Lignosol	24	0.38
Lime	35	0.56
"Lime, Colloidal"	42	0.67
"Lime, Dolomitic"	42	0.67
"Lime, Granules"	80	1.28
"Lime, Hydrated"	40	0.64
"Lime, Pebble"	45	0.72
"Lime, Pulverized Quick"	60	0.96
"Lime, Quick"	55	0.88
"Lime, Rock Dust"	82	1.31
Limestone	60	0.96
Limestone Dust	69	1.11
Limestone Filler	63	1.01
Limestone Flour	69	1.11
"Limestone, Ground"	59	0.95
"Limestone, Pulverized"	68	1.09
Linseed Meal	23-28	0.37-0.45
Litharge	182	2.92
Magnesia	78	1.25
Magnesite	27	0.43
Magnesite Light	40	0.64
Magnesium Carbonate	12	0.19
Magnesium Chips	60	0.96
Magnesium Chloride	12	0.19



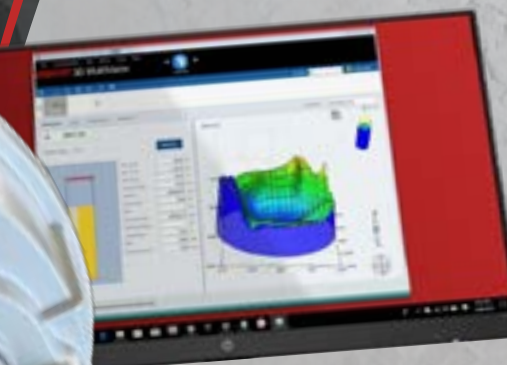
## Level Control Sensors & Software

BinMaster is your Industry 4.0 provider for level sensors and cloud inventory software.

Choose from dust-defying 80 GHz non-contact radar, laser level sensors or the exclusive **3D Level Scanner**.

Complete bulk material inventory solutions using gateways, wireless devices, and point level switches.

**Fast. Friendly. That's BinMaster.**



3D MultiVision Software



Level Sensors



Gateways



Local Displays



Cloud Software & App

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Magnesium Hydroxide	39	0.62
Magnesium Hydroxide	34.4	0.55
Magnesium Oxide	65	1.04
Magnesium Silicate	58	0.93
Magnesium Stearate	21	0.34
Magnesium Sulfate	52	0.83
Magnetite	165	2.64
"Malt, Powder"	41	0.66
"Malt, Sprouts"	13-16	0.21-0.26
Malted Barley Flour	40	0.64
Malted Wheat Flour	41	0.66
Maltrin Maltodextrin	48	0.77
Manganese Dioxide	70	1.12
Manganese Ore	110	1.76
Manganese Oxide	120	1.92
Manganese Sulphate	70	1.12
Mannitol	38	0.61
Manzate	35	0.56
Marasperse	25	0.4
"Marble, Granules"	80	1.28
"Marble, Ground"	93	1.49
Meat Meal	37	0.59
Meat Tenderizer	35	0.56
Melamine	45	0.72
Melamine Powder	32	0.51
Metallic Baghouse Dust	70	1.12
Metallic Flakes	35	0.56
Metallic Powder	165	2.64
Metasol	38	0.61
Methocel	26	0.42
Mica Flakes	10	0.16
Mica Powder	41	0.66
Mica Soapstone	47	0.75
Microcel	28	0.45
"Milk, Non-Fat Dry"	35	0.56
"Milk, Powdered"	13	0.21
"Milk, Powdered, Whole"	35	0.56
"Milk, Whole"	32	0.51
Millet	40	0.64
Milltown	35	0.56

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
"Milo, Ground"	32-36	0.51-0.58
Mineral Core Dust	15	0.24
Mineral Oxide	35	0.56
Mira-Flo	10	0.16
Molasses Feed	20-25	0.32-0.40
Mold Inhibitor	40	0.64
Molding Compound	42	0.67
Molding Powder	42	0.67
Molding Sand	75	1.2
Molybdenum Disulfide	44	0.7
Molybdenum Oxide	98	1.57
Molybdic Oxide	16	0.26
Molybdite, Powder	107	1.71
Monosodium Phosphate	55	0.88
Mortar, Wet	150	2.4
Multi Grain Cheerios Cereal	7.2	0.12
Multiclone Dust	75	1.2
"Mushroom Particles, Dry"	51	0.82
Mustard Compound	21	0.34
Mustard Spice A	50	0.8
Mustard Spice B	45	0.72
"Mustard, Powder"	16	0.26
Myverol	40	0.64
Naphthalene Flakes	36	0.58
Natrosol	28	0.45
Neutral Granules	24	0.38
News Print & Sawdust	2	0.03
Niacin (Nicotinic Acid)	35	0.56
Nickel	60	0.96
Nickel Ore Dust	60	0.96
Nickel Oxide	28	0.45
Nickel Powder	75	1.2
Nitrate of Soda	85	1.36
Nitro-Carbo-Nitrate	66	1.06
"Nodule Dust, Coke"	53	0.85
Nuchar	12	0.19
"Nuts, Almonds"	29	0.46
"Nuts, Cashews"	31	0.5
"Nuts, Peanuts, Shelled"	43	0.69



## SMARTBOB

**SmartBob®** works like an automated tape measure, dropping a weighted cable to the material surface at timed intervals. Also known as a plumb bob or bin bob, this sensor is highly reliable and has a long service life. A network of SmartBobs can provide inventory control for up to 255 bins of heights up to 150 feet.

LET'S TALK

LET'S TALK

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
"Nuts, Peanuts, Unshelled"	17-24	0.27-0.38
Nylon Fibers	10	0.16
Nylon Flakes	32	0.51
"Nylon Pellets, 1/8""	35	0.56
Nylon Powder	39	0.62
Oat Flour	33	0.53
"Oat Groats, Whole"	46.5	0.74
Oat Hulls	8	0.13
Oat Middlings	38	0.61
Oats	27	0.43
"Oats, Ground"	29	0.46
"Oats, Rolled"	19-24	0.30-0.38
Oil Cake	45-50	0.72-0.8
Onion Powder	25	0.4
"Onion, Chopped"	14	0.22
"Onion, Minced"	8	0.13
"Opalon Pellets, 1/4""	33	0.53
Opalon PVC	30	0.48
Opti White Pigment	47	0.75
Orange Peel, Dry	15	0.24
"Orlon, Polymer, Powder"	30	0.48
Orzan	29	0.46
Oxalic Acid	52	0.83
Oxpyridmidine	23	0.37
Oxychloride	36	0.58
Oyster Shells, Ground	50-60	0.8-0.96
Oyster Shells, Whole	80	0.85
Paint Float 600	40	0.64
Paper Dust	5	0.08
Paper Sequins	15	0.24
Paraformaldehyde	40	0.64
Parsley Flakes	3	0.05
Parsley Salt Blend	34.4	0.55
Parzate	19	0.3
Paste Resin	31	0.5
Peanut Brittle	36	0.58
Peanut Meal	28	0.45
"Peanuts, Shelled"	43	0.69
"Peanuts, Unshelled"	17-24	0.27-

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
		0.38
Peat Moss	10	0.16
Penford Gum Starch	38	0.61
Penicillin Compound	22	0.35
Penne Pasta	28	0.45
Pentaerythritol	44	0.7
Pentarythritol	50	0.8
Peppermint	32	0.51
Peppermint Powder	34	0.54
"Peppers, Chopped"	21	0.34
"Peppers, Whole"	16	0.26
Perlite	15	0.24
Perlite Filter Aid	8	0.13
Perlite Ore	65	1.04
"Petro-Ag, Granules"	43	0.69
"Petro-Ag, Powder"	40	0.64
Petroleum Coke Dust	25	0.4
Petroleum Coke	55	0.88
Pharmaceutical Lubricant	9	0.14
Pharmaceutical Mix	31	0.5
Phenobac	30	0.48
Phenofil	30	0.48
Phenol Formaldehyde	30	0.48
Phenolic Powder	32	0.51
Phosphate	80	1.28
Phosphate Rock Dust	90	1.44
Phosphate Rock Powder	90	1.44
"Phosphate Rock, Crushed"	69	1.11
"Phosphate Rock, Ground"	70	1.12
Phosphate Tri-Calcium	68	1.09
Phosphorous Penta Sulfide	75	1.2
Phosphorous Pentoxide	40	0.64
Phthalic Anhydride	52	0.83
Pie Crust Mix	35	0.56
Pigment	9	0.14
Pipette Rigate	24.8	0.4
Pitch	37	0.59
Plaster of Paris	49	0.78
Plastic Beads	46	0.74
Plastic Cubes	38	0.61
Plastic Flakes	48	0.77

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
"Plastic Flakes 3/8""	48	0.77
"Plastic Flakes, Large"	19	0.3
"Plastic Flakes, Small"	34	0.54
Plastic Material Coloring	35	0.56
Plastic Pellets	45	0.72
Plastic Powder	42	0.67
Plastic Powder A	41	0.66
Plastic Powder B	26	0.42
Plastic Resin	40	0.64
"Plastic Scrap, Flakes, 7/8""	40	0.64
"Plastic Spheres, 1/16""	43	0.69
"Plastic, Chopped"	38	0.61
Polycarbonate Resin	44	0.7
Polyester Adhesive Powder	30	0.48
Polyester Flakes	27	0.43
Polyester Resin	34	0.54
"Polyester, Cubes"	47	0.75
"Polyester, Film Fragments"	6	0.1
Polyethylene	43	0.69
Polyethylene Beads	42	0.67
Polyethylene Film	8	0.13
Polyethylene Flakes	6	0.1
Polyethylene Granules	30	0.48
Polyethylene Pellets	35	0.56
"Polyethylene Pellets, 1/8""	36	0.58
Polyethylene Powder	35	0.56
Polyhedral Alcohol	37	0.59
Polymer	20	0.32
Polymer Reagent	39	0.62
Polymer Resin	38	0.61
Polymide Resin	31	0.5
"Polyolefin Pellets, 3/32""	21	0.34
Polypropylene	30	0.48
Polypropylene Flakes	22	0.35
"Polypropylene Pellets, 1/8""	32	0.51
Polypropylene Powder	33	0.53
"Polystyrene Beads, 1/16""	40	0.64
Polystyrene Pellets	40	0.64
"Polystyrene Pellets, 1/8""	38	0.61
Polystyrene Powder	33	0.53
Polystyrene Scrap	31	0.5

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Polyurethane Granules	22	0.35
"Polyurethane, Pellets, 1/8""	45	0.72
Polyvinyl Acetate	39	0.62
Polyvinyl Alcohol	39	0.62
Polyvinyl Alcohol (PVA)	37.6	0.6
Polyvinyl Chloride	41	0.66
"Polyvinyl Chloride Pellets 1/8""	39	0.62
"Polyvinyl Chloride, Re grind"	18	0.29
Popcorn Seasoning	66.4	1.06
Pork Spice	72	1.15
"Potassium Bromide, 5% Moist."	114	1.83
"Potassium Carbonate, Potash"	74	1.19
Potassium Chloride	60	0.96
Potassium Iodate	129	2.07
Potassium Muriate	68	1.09
Potassium Sulfate	90	1.44
Potato Flakes	13	0.21
Potato Pancake Mix	44	0.7
Potato Powder	48	0.77
Potting Soil	16	0.26
Poultry Meal	34-39	0.54-0.62
Powder Sugar	35	0.56
Precipitator Dust	46	0.74
Pre-Mix	35	0.56
"Propellant, Solid, Dry"	48	0.77
Protein Blend	44	0.7
Protein Supplement	34	0.54
Prussian Blue	36	0.58
Pumice Powder	39	0.62
Purezaust Pellets	50	0.8
PVC Chips	54	0.86
PVC Resin	32	0.51
Pynte Cinders	124	1.99
Pyrites, Iron	135-145	2.16-2.32
Q-Cel	12	0.19
"Quartz, 0.5"" Screenings"	80-90	1.28-1.44
"Quartz, 1.5 - 3"" Lumps"	85-95	1.36-1.52
Qvibe 90 RF	120	1.92

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
"Rags, Chopped"	8	0.13
"Raisins, Moist"	38	0.61
Rapeseed	48.3	0.77
"Records, Ground Plastics"	41	0.66
Red Color Concentrate	32	0.51
Red Lead	165	2.64
Red Oxide Pigment	72	1.15
Refractory Mix	96	1.54
Regrind - Polypropylene Ticona	28	0.44
Resimene	35	0.56
Resin Binder	35	0.56
"Resin, Synthetic H.D."	34	0.54
Resin-Luron	40	0.64
Resinous Polymer	22	0.35
Rice	45	0.72
Rice	52	0.83
Rice & Vitamin Mix	48	0.77
Rice Bran	26	0.42
"Rice, Cream & W/Vitamins"	48	0.77
"Rice, Puffed"	6	0.1
Rock Salt	68	1.09
Roloids® Mix Powder	65	1.04
Rooibos Dried Tea	20	0.32
Rosin	65-68	1.04-1.09
Rouge Compound	58	0.93
Rubber Composition Powder	34	0.54
Rubber Compound	38	0.61
Rubber Crumb	22	0.35
"Rubber Foam, Chopped"	3	0.05
Rubber Granules	28	0.45
"Rubber Pellets, Irregular"	29	0.46
Rubber Powder	33	0.53
Rutile & Coke	91	1.46
Rye Bran	15-20	0.24-0.32
Rye Feed	33	0.53
Rye Middlings	42	0.67
Rye Shorts	33.5	0.54
"Rye, Malted"	32	0.51
"Rye, Whole"	43-45	0.69-

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Sage Leaves	18	0.29
Safflower, Seed	45	0.72
Safflower, Meal	50	0.8
Salicylic Acid	29	0.46
Salt & Myverol	54	0.86
Salt Flakes	42	0.67
Salt Flour	64	1.03
"Salt, Clay"	38	0.61
"Salt, Fine Table"	86	1.38
"Salt, Granulated"	80	1.28
"Salt, Rock"	68	1.09
Sand	99	1.59
"Sand, Dry"	110	1.76
"Sand, Fine"	125	2
"Sand, Foundry"	100	1.6
"Sand, Foundry, Coarse"	96	1.54
"Sand, Foundry, Fine"	104	1.67
"Sand, Foundry, NJ Silica"	97	1.55
"Sand, Moist"	130	2.08
"Sand, Molding"	78	1.25
Sand-Kaolin Mix	53	0.85
Santonox	25	0.4
Saran Powder	35	0.56
"Sawdust, Coarse"	25	0.4
"Sawdust, Fine"	18	0.29
"Sawdust, Moist"	28	0.45
Seal Coal	32	0.51
Seasoning Blend	30	0.48
"Seasoning, Barbecue"	30	0.48
Selenium Powder	62	0.99
Separan Fine	48	0.77
Sesame Seed	27-41	0.43-0.66
Shale, Crushed	85-90	1.36-1.44
Shellac Resin	81	1.3
Shredded Goodyear Tire Scrap Chucks	24.8	0.4
Shredded Goodyear Tire Scrap Fine Rubber Powder	32.8	0.53

Just one call gets you a **Complete Solution.**  
Get your free quote fast today



Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Silene	15	0.24
Silene & Zinc Stearate	15	0.24
Silflo Filter Aid	10	0.16
Silica Cubes	45	0.72
Silica Flour	80	1.28
Silica Gel	42	0.67
"Silica Gel, Sorbead"	55	0.88
Silica Sand	81	1.3
Silicon Carbide	45	0.72
Silicon Dioxide	3	0.05
Silver Powder	69	1.11
Slag, Furnace, Granular, Dry	60-65	0.96-1.04
Slag, Furnace, Granular, Wet	90-100	1.44-1.6
"Slate, Crushed"	100	1.6
Sludge, Sewage, Dried	40-50	0.64-0.8
SMA	35	0.56
SMA Pellets	42	0.67
Soap Flakes	29	0.46
Soap Powder	36	0.58
Soapstone	47	0.75
Soda Ash	54	0.86
Soda Ash-Iron Chromite	77	1.23
Sodium Aluminate	61	0.98
Sodium Benzoate	47	0.75
Sodium Bisulphate	90	1.44
Sodium Borate	77	1.23
Sodium Caseinate	21	0.34
Sodium Chloride	80	1.28
Sodium Chloride	83	1.33
Sodium Hydrosulfate	70	1.12
Sodium Hydrosulphate	73	1.17
Sodium Hydrosulphite	73	1.17
Sodium Hydroxide	60	0.96
Sodium Metasilicate	70	1.12
Sodium Naphtholine Sulph.	27	0.43
Sodium Nitrate	84	1.35
Sodium Perborate	53	0.85
Sodium Phosphate VNX	80	1.28
Sodium Phospho Aluminate	68	1.09
Sodium Pyrophosphate	63	1.01

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Sodium Silicate	32	0.51
Sodium Sulfate	85	1.36
Sodium Sulfite	102	1.63
Sodium Thiosulfate	55	0.88
Sodium Tripolyphosphate	60	0.96
Somagen Sol	19	0.3
Sorghum Seed	32-35	0.51-0.56
Soybean Flakes	36	0.58
Soybean Flour	44	0.7
Soybean Hulls	25	0.4
Soybean Meal	40	0.64
Soybeans	48	0.77
Spandex (Polyurethane)	15.2	0.24
Spice Blend	36	0.58
Sponge Iron	150	2.4
Stabilizer	71	1.14
"Stabilizer, Food"	54	0.86
"Stabilizer, Plastic"	67	1.07
Sta-Nut	53	0.85
Starch Granules	46	0.74
Starch Powder	40	0.64
"Starch, Corn"	43	0.69
Starch-Industrial Binder	43	0.69
Starch-Mile	39	0.62
Stearate Blend	41	0.66
Stearic Acid Flakes	32	0.51
Stearic Acid Powder	36	0.58
Steel Grit	225	3.6
Steel Powder	150	2.4
Stonclad UR C-1 1039C	95.4	1.53
Stonclad UT C1 929C	119	1.91
Stone-Dust	90	1.44
Stonfil OP 2 Part C1	69.9	1.12
Stonlux SL 2mm Aggregate	100	1.6
Stonshield Aggregate Part C 360C	81	1.3
Styrene Beads	45	0.72
Sucrose	53	0.85
Sucrose Octoacetate	33	0.53
Sugar Ind.	46	0.74
"Sugar, Beet"	50	0.8

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
"Sugar, Dextrose"	39	0.62
"Sugar, Granulated"	44	0.7
"Sugar, Powdered"	35	0.56
Sulphur	45	0.72
"Sulphur, Granules"	70	1.12
Sunflower Seed	38.5	0.62
Super Phosphate	70	1.12
Susta	44	0.7
Talc	35	0.56
Talcum Powder	55	0.88
Tallow	58	0.93
Tanbark, Ground	55	0.88
Tantalum Powder	40	0.64
Tea	27	0.43
Tea Flakes	24	0.38
Tea Powder	27	0.43
Teflon Fiber	30	0.48
Teflon Granules	36	0.58
"Teflon Pellets, 1/8""	60	0.96
Teflon Powder	29	0.46
Tekseal	56	0.88
Terephthalic Acid	30	0.48
Thiamine	47	0.75
Thionex	30	0.48
Thorium Oxide	62	0.99
Tide	40	0.64
Timothy Seed	36	0.58
Titanium Dioxide	48	0.77
Titanium Sponge	60	0.96
Tobacco Leaves	6	0.1
Tobacco Powder	28	0.45
"Tobacco, Cigarette"	12	0.19
Trap Rock	91	1.46
Tricalcium Phosphate	85	1.36
Trichlorocyanuric Acid	50	0.8
Triplact	12	0.19
Tripolyphosphate	80	1.28
Trisodium Phosphate	50	0.8
"Tumaric Acid, Fines"	51	0.82
Tungsten Carbide	250	4
Uranium Compound	191	3.06

Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>
Uranium Granules	184	2.95
Uranium Oxide	108	1.73
Urea	42	0.67
Urea Formaldehyde	36	0.58
Urea Molding Powder	45	0.72
Urea Powder	39	0.62
Urea Prills	45	0.72
Urethane Foam	18	0.29
Vanadium Catalyst	40	0.64
Vegetable Oil Powder	34	0.54
Vermiculite	62	0.99
Vicron	34	0.54
"Vicron, Limestone"	62	0.99
Vicrum	35	0.56
Vinyl Acetate	36	0.58
Vinyl Blend	40	0.64
"Vinyl Chips, Irregular"	20	0.32
Vinyl Compound	36	0.58
Vinyl Copolymer Resin	40	0.64
"Vinyl Pellets, 1/8""	36	0.58
Vinyl Powder	34	0.54
Vinyl Resin	36	0.58
Vitamin Additive	41	0.66
Vitamin Compound	42	0.67
Vitamin Enrichment	40	0.64
Vitamin Mix	44	0.7
Vitamin Powder	35	0.56
Viton Rubber Crumb	33	0.53
Waffle Mix	42	0.67
Walnut Shells, Crushed	35-45	0.56-0.72
Water Softener Compound	39	0.62
Wax	27	0.43
Wax Flakes	50	0.8
Wax Powder	38	0.61
Wheat Bran	11.0-	0.18-
	16.0	0.26
Wheat Flour	30	0.48
Wheat Gluten	43	0.69
Wheat Hulls	44	0.7
Wheat Middlings	15	0.24

Bulk Material	Bulk Density		Bulk Material	Bulk Density	
	lb./ft <sup>3</sup>	g/cm <sup>3</sup>		lb./ft <sup>3</sup>	g/cm <sup>3</sup>
"Wheat, Cracked"	35	0.564			
"Wheat, Cut"	46	0.74			
"Wheat, Shaved"	34	0.54			
"Wheat, Whole"	45-52	0.72-0.83			
Whey	35	0.56			
White Lead	72-100	1.15-1.60			
White Powder	40	0.64			
White Whey Powder	20	0.32			
Wood Cellulose	18	0.29			
Wood Chips	18	0.29			
"Wood Chips, 2''' x 2''' x 3''''"	30	0.48			
Wood Flour	20	0.32			
Wood Shavings	10	0.16			
Yeast	59	0.95			
Zinc Ammonium Chloride	66	1.06			
Zinc Carbonate	35	0.56			
Zinc Dust	200	3.2			
Zinc Hydrosulfite	44	0.7			
Zinc Oxide	55	0.88			
Zinc Powder	210	3.36			
Zinc Skims	65	1.04			
Zinc Stearate	14	0.22			
Zinc Sulphate	83	1.33			
Zirconite	89	1.43			