**Stowage factors**

**STOWAGE FACTORS, cbft/mt (1 cbm = 35.31 cbft)**  
Information in the below columns is merely a guide and no substitute for checking accurate stowage factors from local agents and/or shippers, or for inserting appropriate figures in contracts of carriage.

| **CARGO** | **BULK** | **BAGGED** | **BALED** |
| --- | --- | --- | --- |
| ALUMINA | 37-42 |  |  |
| ALUMINA SILICA | 25 |  |  |
| ALUMINIUM DROSS | 29 |  |  |
| ALUMINIUM FERROSILICON POWDER | 25 |  |  |
| ALUMINIUM INGOTS | 31 |  |  |
| ALUMINIUM NITRATE | 21 |  |  |
| ALUMINIUM ORE | 28 |  |  |
| ALUMINIUM SILICON POWDER | 25 |  |  |
| ALUNITE | 25 |  |  |
| AMMONIUM BICARBONATE |  | 49 |  |
| AMMONIUM CHLORIDE |  | 47 |  |
| AMMONIUM NITRATE FERTILIZER | 30-35 | 44-50 |  |
| AMMONIUM SULPHATE | 34-38 | 43-47 |  |
| ANHYDROUS BORAX | 27-29 |  |  |
| ANTHRACITE | 40-47 |  |  |
| ANTIMONY ORES / RESIDUE | 13 |  |  |
| APATITE CONCENTRATE | 19-20 |  |  |
| ARGENITE | 25 |  |  |
| ASBESTOS ORE |  | 55-75 |  |
| ATTAPULGITE (RAW) | 45-50 |  |  |
| ATTAPULGITE (HYDRATED) | 70-75 |  |  |
| BALL STONE | 27 | 34 |  |
| BARITE = BARYTES | 15-25 | 16-21 |  |
| BARLEY | 53-56 | 58-60 |  |
| BASIC SLAG | 27-29 | 30-32 |  |
| BAUIXTE | 27-32 |  |  |
| BEANS | 50-55 | 55-60 |  |
| BEET PULP | 56 |  |  |
| BENTONITE | 40 |  |  |
| BLENDE | 19 |  |  |
| BONES MEAL |  | 80 |  |
| BORAX -ANHYDROUS BORAX | 27-29 |  |  |
| BORAX -CALCINED RASORITE | 27-29 |  |  |
| BORAX -COLEMANITE | 22-23 |  |  |
| BORAX -RASORITE 46 (PENTAHYDRITE CRUDE) | 36-38 |  |  |
| BORAX -TINCAL | 36-38 | 41-44 |  |
| BORAX -ULEXITE | 36-38 |  |  |
| BORIC ACID |  | 50 |  |
| BORNITE | 16 |  |  |
| BROAN BEAN | 53 |  |  |
| BROWN MANGANESE | 18 |  |  |
| BUCKWHEAT | 61 | 71 |  |
| CALCINED PYRITE | 16 |  |  |
| CALCINED RASORITE | 27-29 |  |  |
| CALCIUM AMMONIUM NITRATE | 30-35 | 44-50 |  |
| CALCIUM CARBONATE PRECIPTATED |  | 47 |  |
| CALCIUM HYDRATE (LIME) | 27 | 40-42 |  |
| CALCIUM NITRATE FERTILIZER | 32-40 |  |  |
| CALCIUM PHOSPHATE | 25 |  |  |
| CANDLE |  | 56 |  |
| CARBORUNDUM | 20 |  |  |
| CASTOR BEANS |  | 78 |  |
| CASHEW NUTS |  | 75 |  |
| CELESTITE | 19-21 |  |  |
| CEMENT | 22-27 | 23-28 |  |
| CEMENT CLINKER | 25-30 |  |  |
| CERARGYRITE | 25 |  |  |
| CERUSSITE | 16 |  |  |
| CHALCOCITE | 16 |  |  |
| CHALCOPYRITE | 16 |  |  |
| CHALK | 35-40 |  |  |
| CHARCOAL | 95 |  |  |
| CHINA CLAY (KAOLIN) | 35-45 | 40-45 |  |
| CHROME PELLETS | 21 |  |  |
| CHROMIC IRON ORE | 14 |  |  |
| CHROMIUM ORE | 14 |  |  |
| CHRYSOLITE (OLIVINE) | 21-23 |  |  |
| CITRUS PULP PELLETS | 55-58 |  |  |
| CLAY | 29-41 |  |  |
| COAL | 38-50 |  |  |
| COAL BRIQUETTES | 54-60 |  |  |
| COAL SLURRY | 38 |  |  |
| COAL TAR | 49-52 |  |  |
| COBALT GLANCE | 18 |  |  |
| COBALT ORE | 18 |  |  |
| COCOA |  | 80 |  |
| COFFEE |  | 60-70 |  |
| COIR |  |  | 90-130 |
| COKE | 60-100 |  |  |
| COKE BREEZE | 50-65 |  |  |
| COKE -FOUNDRY COKE | 80-90 |  |  |
| COKE -FURNACE COKE | 70-80 |  |  |
| COLEMANITE | 22-23 |  |  |
| COPPER CONCENTRATE | 14-18 | 22-28 |  |
| COPPER GRANULES | 8-9 |  |  |
| COPPER MATTE | 14-19 | 18-20 |  |
| COPPER ORE | 15-20 |  |  |
| COPPER PYRITES | 20-22 |  |  |
| COPPER SLAG | 35-40 |  |  |
| COPRA | 75 | 85 |  |
| COPRA CAKE | 60 | 65 |  |
| COPRA CHIPS | 100 |  |  |
| COPRA EXPELLERS | 60 | 65 |  |
| COPRA MEAL | 60 | 70 |  |
| CORN (MAIZE) | 47-52 | 52-56 |  |
| CORUNDUM | 35-40 | 40-45 |  |
| COTTON |  |  | 60-130 |
| COTTON SEEDS |  | 90-100 |  |
| COTTONSEEDS CAKE | 55-65 |  |  |
| COTTONSEEDS EXPELLERS | 60-65 |  |  |
| COVELLITE | 16 |  |  |
| CRYOLITE | 25 |  |  |
|  |  |  |  |

| **CARGO** | **BULK** | **BAGGED** | **BALED** |
| --- | --- | --- | --- |
| DEAD MAGNESITE | 29 | 47 |  |
| DI-AMMONIUM PHOSPHATE (DAP) | 41-45 | 45-47 |  |
| DI-CALCIUM PHOSPHATE | 55-60 |  |  |
| DIRECT REDUCED IRON | 18 |  |  |
| DOLOMITE | 20-23 |  |  |
| DRIED POTATO SLICES |  | 71 |  |
| DRIED SILK WERM CHRYSALIS MEAL |  | 69 |  |
| DRIED TURNIP |  | 95 |  |
| DRY COPRA | 71 |  |  |
| EARTHY COBALT | 21 |  |  |
| EMERY | 18-20 | 20-30 |  |
| ESPARTO |  |  | 130-170 |
| FEATHERS MEAL |  | 160 |  |
| FEED WHEAT | 46-48 |  |  |
| FEEDING STUFFS |  | 80 |  |
| FELDSPAR | 22-30 | 27-35 |  |
| FERBERITE | 26 |  |  |
| FERROCHROME | 8 |  |  |
| FERROMANGANESE | 8 |  |  |
| FERROPHORPHORS | 7 |  |  |
| FERROSILICON | 21 |  |  |
| FIRE CLAY | 53 |  |  |
| FISH MEAL | 47 | 71 |  |
| FLAX |  |  | 100-155 |
| FLUORSPAR -BLOCKS | 12 |  |  |
| FLUORSPAR -WET | 17-20 |  |  |
| FLUORSPAR -DRY | 20-25 |  |  |
| FLY ASH | 44 |  |  |
| FOUNDRY SAND | 26 |  |  |
|  |  |  |  |

| **CARGO** | **BULK** | **BAGGED** | **BALED** |
| --- | --- | --- | --- |
| GALENA | 16 |  |  |
| GLUTEN PELLETS | 64 |  |  |
| GRANITE -BLOCKS | 15-20 |  |  |
| GRANITE -CHIPPINGS | 29-30 |  |  |
| GRANULATED SLAG | 32 |  |  |
| GRAPHITE IN FLAKES |  | 71 |  |
| GRAPHITE IN POWDER |  | 40 |  |
| GRASS MEAL |  | 95 |  |
| GRAY COBALT | 18 |  |  |
| GREEN BEEN |  | 61 |  |
| GROUNDNUTS | 60-110 | 65-90 |  |
| GYPSUM | 27-40 | 40-45 |  |
| HAY |  |  | 125-350 |
| HAZELNUT KERNELS |  | 75 |  |
| HEMATITE | 19 |  |  |
| HEMP |  |  | 90-110 |
| HEMP SEEDS |  | 75 |  |
| HSS | 47-52 | 52-54 |  |
| HUBNERITE | 26 |  |  |
| ILMENITE | 11-15 |  |  |
| IRON ORE | 19 |  |  |
| IRON ORE CONCENTATE | 19 |  |  |
| IRON ORE PELLETS | 14 |  |  |
| IRON OXIDES | 16 |  |  |
| IRON SPONGS | 16 |  |  |
| IRON SWARF | 16 |  |  |
| IRONSTONE | 19 |  |  |
| JUTE |  | 100-105 | 65 |
| KAINIT (POTASH) | 33-36 | 35-37 |  |
| KALISALT (POTASH) | 33-36 | 35-37 |  |
| KAOLIN (CHINA CLAY) | 35-45 | 40-45 |  |
| LEAD CHROMATE ORE | 14 |  |  |
| LEAD NITRATE | 28 |  |  |
| LEAD CONCENTRATES | 12-13 |  |  |
| LEAD ORE | 13-14 | 16 |  |
| LEAD SULFATE ORE | 16 |  |  |
| LENTILS | 50-55 | 55-60 |  |
| LICORICE ROOT |  | 130-140 | 85 |
| LIME (CALCIUM HYDRATE) |  | 40-42 |  |
| LIMESTONE | 24-30 |  |  |
| LIMONITE | 19 |  |  |
| LINSEED | 50-60 | 55-65 |  |
| LITHIUM | 25 |  |  |
| LITHOPONE |  | 44 |  |
| LOGS | 109 |  |  |
| LUPINSEED | 44-48 |  |  |
|  |  |  |  |

| **CARGO** | **BULK** | **BAGGED** | **BALED** |
| --- | --- | --- | --- |
| MAGNESITE | 22 | 53 |  |
| MAGNESIUM ALUMINIUM SILICATE (SEE ATTAPULGITE) |  |  |  |
| MAGNESIUM CARBONATE (MAGNESITE) | 20-30 |  |  |
| MAGNESIUM CHORIDE |  | 57 |  |
| MAGNESIUM NITRATE | 29 |  |  |
| MAGNESITE (MAGNESIUM CARBONATE) | 20-30 |  |  |
| MAGNISIUM SULPHATE |  | 46 |  |
| MAIZE | 47-52 | 52-56 |  |
| MAIZE BROKEN |  | 57 |  |
| MAIZE COB MEAL |  | 125 |  |
| MAIZE EMBRYO |  | 63 |  |
| MAIZE EMBRYO CAKE |  | 64 |  |
| MALACHITE | 14 |  |  |
| MALT | 54-56 | 56-58 |  |
| MANGANESE ORE | 18 |  |  |
| MANGANIC CONCENTRATE | 16 |  |  |
| MANGANITE | 18 |  |  |
| MANIOC | 60-62 | 60-62 |  |
| MARBLE BLOCKS | 15-20 |  |  |
| MILORGANITE | 54 |  |  |
| MONO-AMMONIUM PHOSPHATE (MAP) | 42-46 |  |  |
| MOONSTONE | 26 |  |  |
| MURIATE OF POTASH (MOP) = POTASSIUM CHLORIDE | 30-40 |  |  |
| NAPTHALENE |  | 70 |  |
| NEPHELINESYENITE | 16 |  |  |
| NICKEL ORE CONCENTRATE | 16 |  |  |
| NIGER SEED MEAL | 64 |  |  |
| NITRO PHOSPHATIC COMPOUND (NPK) | 35-40 | 48-53 |  |
| NPK (NITRO PHOSPHATIC COMPOUND) | 35-40 | 48-53 |  |
| OATS CLIPPED | 48-62 | 64-72 |  |
| OATS UNCLIPPED | 71-77 | 83-85 |  |
| OIL CAKES | 50-65 | 55-75 |  |
| OLIVINE (CHRYSOLITE) | 21-23 |  |  |
| ONIONS |  | 85 |  |
| OXILIC ACID |  | 54 |  |
| PADDY | 53 | 71 |  |
| PALM KERNELS | 60-65 | 70-75 |  |
| PARAFFIN WAX |  | 54 |  |
| PEACH KERNELS |  | 65-85 |  |
| PEANUT MEAL | 64 |  |  |
| PEANUTS | 116 |  |  |
| PEAT |  |  | 90 |
| PEBBLES | 21 |  |  |
| PELLETS (GRAIN -WIDELY) | 45-65 | 60-90 |  |
| PENCIL PITCH | 52 |  |  |
| PENTAHYDRITE CRUDE (RASORITE 46) | 36-38 |  |  |
| PERLITE | 35-38 |  |  |
| PETROLEUM COKE | 40-60 |  |  |
| PHOSPHATE ROCK | 28-35 | 45-50 |  |
| PIG IRON | 14 |  |  |
| PINENUT KERNELS |  | 75 |  |
| PITCH PENCIL | 50-55 |  |  |
| PITCH PRILL | 30-35 |  |  |
| POLLARDS |  | 70-90 |  |
| POONAC |  | 80 |  |
| POSHAN BAUXITE | 25 |  |  |
| POTASH | 33-36 | 35-37 |  |
| POTASSIUM CHLORIDE = MURIATE OF POTASH (MOP) | 30-40 |  |  |
| POTASSIUM FELSPAR SAND | 26 |  |  |
| POTASSIUM NITRATE (SALTPETRE) | 31 |  |  |
| POTASSIUM SULPHATE FERTILIZER | 28-32 |  |  |
| POTATO | 55 | 60-70 |  |
| POYVINYL CHORIDE |  | 47 |  |
| PSILOMELANE | 18 |  |  |
| PUMICE | 50-70 |  |  |
| PUMPKIN SEEDS |  | 85 |  |
| PVC RESINS |  | 52 |  |
| PYRITE | 16 |  |  |
| PYRITE ASHES | 16 |  |  |
| PYRITE CINDERS | 16 |  |  |
| PYRITES | 16 |  |  |
| PYROLUSITE | 18 |  |  |
| PYROPHYLITE | 18 |  |  |
| QUARTZ | 22 |  |  |
|  |  |  |  |

| **CARGO** | **BULK** | **BAGGED** | **BALED** |
| --- | --- | --- | --- |
| RAPESEED | 53-57 | 60-65 |  |
| RASORITE 46 (PENTAHYDRITE CRUDE) | 36-38 |  |  |
| RED LEAD |  | 37 |  |
| REFINED SALT |  | 35 |  |
| RESIN |  | 88 |  |
| RICE -PADDY (ROUGH) | 56-60 | 64-67 |  |
| RICE -BROWN (CLEAN) | 45-50 | 53-55 |  |
| RICE -WHITE (POLISHED) |  | 50-52 |  |
| RICEBRAN | 70-75 | 82-86 |  |
| RICEMEAL |  | 64-67 |  |
| RUBBER |  |  | 65-70 |
| RUTILE SAND | 14-20 | 25-30 |  |
| RYE | 49-52 | 53-55 |  |
| SALT | 30-40 |  |  |
| SALTPETRE (POTASSIUM NITRATE) | 31 |  |  |
| SANDS | 11-25 |  |  |
| SAWDUST | 102 |  |  |
| SCHEELITE | 26 |  |  |
| SCORIES (BASIC SLAG) | 27-29 | 30-32 |  |
| SCRAP METAL | 50-65 |  | 40-50 |
| SEEDCAKES | 50-65 | 55-75 |  |
| SEMOLINA | 64-66 |  |  |
| SESAMESEED |  | 55-70 |  |
| SHEANUTS | 65 | 75 |  |
| SIDERITE | 16 |  |  |
| SILICA | 28 |  |  |
| SILICA SAND | 26 |  |  |
| SILICOMANGANESE | 8 |  |  |
| SISAL |  |  | 90-110 |
| SLAG (BASIC SLAG) | 27-29 | 30-32 |  |
| SLEEPERS | 71 |  |  |
| SLIG | 19 |  |  |
| SLIVER ORE | 25 |  |  |
| SMALL RED BEANS | 55 | 56 |  |
| SODA ASH DENSE | 40-45 | 45-50 |  |
| SODA ASH LIGHT | 60-65 | 65-75 |  |
| SODA FELSPAR SAND | 26 |  |  |
| SODIUM BI-CARBONATE |  | 47 |  |
| SODIUM CHLORATE |  | 49 |  |
| SODIUM NITRATE | 28-32 | 32-34 |  |
| SODIUM SULTHATE | 49-53 |  |  |
| SORGHUMS | 44-49 | 52-56 |  |
| SOYABEANS | 48-52 | 55-58 |  |
| SOYBEAN MEAL | 54-66 | 65-75 |  |
| SOYBEAN PELLETS | 55-60 | 65-70 |  |
| STEEL SCRAP | 50-65 |  | 40-50 |
| STEEL SWARF | 16 |  |  |
| STONE IN GRAINS |  | 33 |  |
| SUGAR | 40-43 | 48-53 |  |
| SUGAR BEET PULP PELLETS |  |  | 55-65 |
| SULPHUR | 28-32 | 35-40 |  |
| SUNFLOWERSEED | 85-90 |  |  |
| SUNFLOWERSEED MEAL |  | 59-61 |  |
| SUNFLOWERSEED PELLETS | 62-65 |  |  |
| SUPERPHOSPHATE | 30-35 |  |  |
| SUPERPHOSPHATE -TRIPLE (TSP) | 35-45 | 45-50 |  |
| SWEET POTATOES SLICED | 85 |  |  |
|  |  |  |  |

| **CARGO** | **BULK** | **BAGGED** | **BALED** |
| --- | --- | --- | --- |
| TACONITE | 16 |  |  |
| TALC | 24 | 38 |  |
| TANKAGE | 53 |  |  |
| TAPIOCA PELLETS/CUBES | 50-55 | 65 |  |
| TAPIOCA CHIPS | 70-75 | 85 |  |
| TEA (in chests) |  |  | 70-150 |
| TIN ORE | 17-18 | 21-22 |  |
| TINCAL (BORAX) | 36-38 | 41-44 |  |
| TITANIUM FLUX | 25 |  |  |
| TITANIUM SLAG | 25 |  |  |
| TOBACCO (in hogsheads) |  |  | 70-80 |
| TOBACCO (in cases) |  |  | 120-140 |
| TRIPLE-SUPERPHOSPHATE (TSP) | 35-45 | 45-50 |  |
| TUNGSTEN | 26 |  |  |
| TURNINGS | 45-55 |  |  |
| TYRES FOR TRUCKS | 200 |  |  |
| ULEXITE (BORAX) | 36-38 |  |  |
| UREA | 45-55 | 55-65 |  |
| VANADINITE | 23 |  |  |
| VANADIUM ORE | 23 |  |  |
| VERMICULITE | 46-48 | 48-52 |  |
| WHEAT | 44-49 | 47-52 |  |
| WHEAT BRAN | 70-110 | 80-120 |  |
| WHEAT BRAN PELLETS | 52-55 |  |  |
| WHEAT FLOWER | 51-55 | 51-59 |  |
| WHEAT MIDDLINGS | 58-70 | 80-90 |  |
| WHEAT PELLETS | 53-60 | 60-70 |  |
| WILD SESAME SEEDS |  | 69 |  |
| WOLFRAMITE | 26 |  |  |
| WOODCHIPS | 99 |  |  |
| WOODPULP PELLETS | 106 |  |  |
| ZINC CHLORIDE |  | 43 |  |
| ZINC CONCENTRATES | 16-20 |  |  |
| ZIRCON SAND | 13-19 | 19-21 |  |

+++++

# Stowage factors - bulk cargoes

Estimated stowage factors - bulk cargoes

FROM RIVER PLATE SHIPPING GUIDE

| Grains | S/F |
| --- | --- |
| Barley | 57/58 |
| Linseed | 48/52 |
| Maize | 44/45 |
| Millet | 49/51 |
| Oats | 61/63 |
| Sorghum | 47/48 |
| Soyabeans | 48/49 |
| Sunflowerseeds | 85/90 |
| Wheat | 43/44 |

If S/F required for bagged grain, add approximately 10% to the above figures.

| Other bulk cargoes | S/F |
| --- | --- |
| Sugar (raw) | 42/44 |
| Coke (green petcoke) | 50/53 |
| Coke (calcinated) | 48/50 |
| Steel cargoes | S/F |
| Billets and bars | 12/16 |
| Steel sheets | 18/20 |
| Cold rolled coils | 18 |
| Wire rod coils | 52/57 |
| Steel pipes (loose) | 60/65 |
| Steel pipes (bundles) | 50/55 |

| Refrigerated cargoes | S/F |
| --- | --- |
| Frozen boneless beef | 65/70 |
| Frozen cooked beef | 85 |
| Frozen fish fillets | 55/60 |
| Frozen fish (whole) | 70 |
| Frozen squid | 55 |
| Frozen butter (cartons) | 65 |
| Chilled beef (cartons) | 100 |
| Cheese | 60/70 |
| Potatoes | 70/75 |

| Other cargoes | S/F |
| --- | --- |
| Granite slabs | 15/20 |
| Marble blocks | 15/20 |
| Paper reels | 60/70 |
| Honey drums | 55 |

| Meals in pellets | S/F |
| --- | --- |
| Cottonseed | 54/58 |
| Groundnut | 56/58 |
| Linseed (expellers) | 54/55 |
| Pollard | 53/54 |
| Soyabean | 49/50 |
| Soyabean (flour) | 57/58 |

S/F = Estimated stowage factor expressed in cubic feet per ton.