

WEIGHTS and CONVERSION FACTORS for CANADIAN AGRICULTURAL PRODUCTS



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WEIGHTS and CONVERSION FACTORS for CANADIAN AGRICULTURAL PRODUCTS



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ECONOMICS DIVISION

CANADA DEPARTMENT OF AGRICULTURE

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FOREWORD

This bulletin lists weights and conversion factors needed in calculating statistics pertaining to agricultural products. It is a revision of an earlier issue under a similar title, published in 1954 (reprinted in 1956). The present bulletin has broadened the scope of the material and brings the data more in line with present marketing practices.

Unless otherwise noted, the data are national averages and may therefore not be valid for regional use. Figures have been rounded in most cases. In some instances, weights and percentages are fixed by law. Wherever this applies it is indicated by the word "statutory" or "standard".

Inter-departmental committees, representing Agriculture, Trade and Commerce and the Dominion Bureau of Statistics, compiled and prepared the information contained herein after consultation with the industries concerned. Particular mention should be made of the work done by members of the Commodities Unit, Economics Division, Canada Department of Agriculture. The project was coordinated by Miss R. Berthiaume and D.W. Ware.

Three other publications which may be of assistance for further reference are:

"Conversion Factors and Weights and Measures for Agricultural Commodities and Their Products". U.S.D.A., Washington, D.C., May 1952.

"Technical Conversion Factors for Agricultural Commodities". Food and Agricultural Organization, Rome, 1960.

"The Economist Guide to Weights and Measures". Compiled by the Statistical Department of the Economist, London.

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LIVESTOCK AND LIVESTOCK PRODUCTS

CATTLE

Average equivalent from 100 pounds:

Live	53 lb. warm carcass ¹ 51 lb. chilled carcass, skin off 37 lb. boneless beef
Warm carcass	188 lb. live 97 lb. chilled carcass
Chilled carcass	194 lb. live 103 lb. warm carcass 72 lb. boneless beef
Boneless beef	270 lb. live 139 lb. chilled carcass

¹Head, feet, tail and hide off, kidney out and carcass defatted.

Warm Dressed Weight

Average per head of cattle slaughtered under
Health of Animals Division inspection, Canada

1956-60	511.30 lb.
1960	523.62 lb.

Average Yield of Wholesale or Primal Beef Cuts per Chilled Carcass

	percent
Rib, 7 ribs	10.5
Chuck, square cut	25.5
Plate, short	7.0
Brisket	4.0
Fore shank	4.0
<hr/>	
forequarter, 11 ribs	51.0
Full loin, kidney knob cut	19.0
Short hip	25.5
Flank	4.5
<hr/>	
hindquarter	49.0

Average Weight of Variety Meats per Carcass

	pounds
Liver	10.0
Heart	3.5
Kidney	0.75
Tongue	3.5
Head, cheekmeat, brain	4.5
Sweetbreads	3.0
Oxtail	1.25
Tripe, edible	2.25

Average Yield of Retail Cuts of Beef per Choice Grade Steer Carcass

	percent
Round steak	7
Sirloin steak	5
Porterhouse steak	2
T-bone steak	2
Wing steak	2
Sirloin tip roast	4
Rump roast	5
Hamburg and stew beef	11
Fat, bone, waste	11
	<hr/>
hindquarter	49
Prime rib, 5-bone	5
Blade steaks	3
Chuck roasts	8
Cross rib roasts	4
Round bone roasts	3
Plate, rolled	5
Shank, center cut	1
Hamburg and stew beef	12
Fat, bone, waste	10
	<hr/>
forequarter	51

CALVES

Average equivalent from 100 pounds:

Live	61 lb. warm carcass, skin on ¹ 54 lb. warm carcass, skin off ² 59 lb. chilled carcass, skin on 52 lb. chilled carcass, skin off 36 lb. boneless veal
Warm carcass, skin on	164 lb. live 89 lb. warm carcass, skin off 85 lb. chilled carcass, skin off
Warm carcass, skin off	185 lb. live 118 lb. warm carcass, skin on 96 lb. chilled carcass
Cold carcass, skin on skin off	169 lb. live 192 lb. live
Chilled carcass	69 lb. boneless veal
Boneless veal	278 lb. live 145 lb. chilled carcass

¹Head and feet off, kidney in.

²Skin averages 7 percent of live weight.

Warm Dressed Weight

Average per calf slaughtered under Health
of Animals Division inspection, Canada

1956-60 127.92 lb.

1960 135.75 lb.

Average Yield of Retail Cuts of Veal per Chilled, Skinless Carcass

	percent
Leg roast	9
Cutlets	7
Rump	8
Sirloin	6
Loin chops	8
Rib chops	7
Shoulder	22
Breast	10
Stewing meat, boneless	5
Bones, fat, waste	18
	<hr/>
	100.0

Average Weight of Variety Meats per Carcass

	pounds
Liver	2.50
Heart	0.75
Kidney	0.40
Tongue	0.75
Head, cheekmeat, brain	0.80

HOGS

Average equivalent from 100 pounds:

Live	77 lb. warm carcass ¹ 63 lb. cold, trimmed carcass 46 lb. boneless pork
Warm carcass	130 lb. live 81 lb. cold, trimmed carcass ²
Cold, trimmed carcass	160 lb. live 123 lb. warm carcass 74 lb. boneless pork
Boneless pork	216 lb. live 135 lb. cold, trimmed carcass

¹Eviscerated but including kidney and leaf lard.

²Allowing 15 percent for larding fats, 1 percent for tongue and kidney and 3 percent for shrink.

Warm Dressed Weight

Average per hog slaughtered under Health
of Animals Division inspection, Canada

1956-60	161.76 lb.
1960	159.12 lb.

Average Weight of Variety Meats per Carcass

	pounds
Liver	2.75
Heart	0.5
Kidney	0.25
Tongue	0.7

**Average Yield of Wholesale or Primal and Other Pork Cuts
per Cold, Trimmed Carcass**

	percent
Butts	7.5
Picnics, shankless	7.3
Loins	13.7
Bellies	12.5
Hams, regular	21.0
	62.0
Side ribs	3.3
Feet, hocks, tail	4.9
Leaf lard, kidney	2.3
Head, tongue	6.0
Trimmings, 50-80 percent lean	3.2
Back fat, cutting fat	13.0
Bones, skin, scrap	4.3
Cutting shrink	1.0
	38.0

Average Yield of Larding Fats and Lard per Cold, Trimmed Carcass

	percent
Leaf lard	2.0
Back fat, cutting fats	13.0
	15.0
Larding fats	
Lard, 75 percent yield	11.25

SHEEP AND LAMBS

Average equivalent from 100 pounds:

Live	47 lb. warm carcass ¹ 46 lb. chilled carcass 33 lb. boneless meat
Warm carcass	213 lb. live 97 lb. chilled carcass
Chilled carcass	219 lb. live 103 lb. warm carcass 72 lb. boneless meat
Boneless meat	305 lb. live 139 lb. chilled carcass

¹Head, feet and skin off, kidney in.

Warm Dressed Weight

Average per sheep and lamb slaughtered under
Health of Animals Division inspection, Canada

1956-60	44.38 lb.
1960	43.90 lb.

Average Yield of Retail Cuts of Lamb per Chilled Carcass

	percent
Leg	31
Loin chops	8
Rib chops	8
Shoulder roasts and chops	22
Stewing cuts ¹	9
Flank	9
Boné, fats, shank	13
	<hr/>
	100.0

¹Neck, breast, foreshank.

Average Weight of Variety Meats per Carcass

	pounds
Liver	1.0
Heart	0.3
Kidney	0.2
Tongue	0.2
Head, cheekmeat, brain	0.4

Average Yield of Clean (scoured) Wool from Shorn and Pulled Wool

Average fleece weight	7.5 lb.
Shorn wool, clean	60 percent
Pulled wool, clean	7 percent

MEAT EXPORTS AND IMPORTS

Conversion Factors for Meat Exports

Trade of Canada classification number	Trade of Canada description of product	Chilled carcass equivalent
1109	Beef and veal, fresh and frozen Carcasses, sides, quarters, wholesale cuts	1.00
	Boneless	1.40
1309	Beef, cured	1.18
1119	Mutton and lamb, fresh and frozen Carcasses	1.00
	Boneless	1.40
1129	Pork, fresh or frozen	1.00
1329	Bacon and sides, cured	1.10
1339	Hams and shoulders, cured	1.10
1349	Pork, cured, n.e.s.	.93
1525	Ham, boiled, cooked	1.55
1730	Hams, canned	1.37
1739	Pork, canned, n.e.s.	1.35

Conversion Factors for Meat Imports

Trade of Canada classification number	Trade of Canada description of product	Chilled carcass equivalent
2251	Beef and veal, fresh and frozen Carcasses, sides, quarters, wholesale cuts	1.00
	Boneless	1.40
2263	Beef, pickled	1.18
2273	Beef, canned, n.o.p.	1.98
2274	Corned beef, canned	1.98
2252	Mutton and lamb, fresh and frozen Carcasses, cuts	1.00
	Boneless	1.40
2253	Pork, fresh	1.00
2261	Pork, prepared or preserved (bacon, ham, cured, not canned)	1.10

DAIRY PRODUCTS

	Percent of milk fat by weight	Quantity in pounds from 100 pounds whole milk	Pounds of whole milk to make one pound
Whole milk	3.5	100.0	1.0
Milk fat	100.0	3.5	28.6
Butter	81.0	4.3	23.4
Butter oil	99.7	3.51	28.5
Cheddar cheese	34.0	9.0	11.0
Cream cheese	32.0 (wet basis)	9.7	10.3
Dry cream	73.5	4.8	21.0
Condensed whole milk	8.0	43.5	2.3
Evaporated whole milk	8.0	43.5	2.3
Dry whole milk	27.0	12.5	8.0
Skimmed milk	-	90.0	-
Malted milk	7.5	40.0	2.5
		gallons	gallons
Ice cream	11.0	5.9	17.0

Standard Packs

Butter	56 lb. box
Cheddar cheese	90 lb. average box
Condensed whole milk	case of 48 15-fluid-oz. tins
Evaporated whole milk	case of 48 16-fluid-oz. tins

Conversion Rates for Product Equivalents

1 lb. condensed skimmed milk	3 lb. skimmed milk
evaporated skimmed milk	3
dry skimmed milk	11
casein	40
cottage cheese	7
1 lb. condensed buttermilk	3 lb. buttermilk
dry buttermilk	12
1 lb. lactose	22 lb. whey
dry whey	20
1 lb. process cheese	0.7 lb. cheddar cheese

Weight Conversion Rates for Units of Volume

milk	gallon	10.30 lb.
3.5 percent	quart	2.58 lb.
	pint	1.29 lb.
skimmed milk	gallon	10.40 lb.
	quart	2.60 lb.
	pint	1.30 lb.
cream	gallon	10.00 lb.
16.5 percent	quart	2.50 lb.
	pint	1.25 lb.

EGGS

NOTE The Shell Egg Regulations under the Canada Agricultural Products Standards Act provide for different weight divisions in each grade. For instance, under Grade A there are Grade A Extra Large size, Grade A Large size, Grade A Medium size, etc. Since Grade A Large represents the greatest quantity of eggs produced in commercial quantities, calculations are based on that grade.

<i>Fresh</i>	basis statutory Canada Grade A Large	
	weight of 1 egg	2 oz.
	weight of 1 dozen eggs	1.5 lb.
	weight of 1 case (30 doz. net weight)	45 lb.
	carlot	540 cases
	number of eggs per pound	8 eggs
	number of eggs per ton	16,000 eggs
<i>Frozen</i>	weight of 1 dozen fresh eggs	1.3 lb.
	number of fresh eggs per pound	9 eggs
<i>Dried whole</i>	weight of 1 dozen fresh eggs	5.0 oz.
	number of fresh eggs per pound	38 eggs

POULTRY

NOTE Yields in the preparation of poultry for market have been increased by the change to continuous line processing and water cooling in plants as compared with farm dressing and air chilling of some years ago. Practically all poultry processed for market purposes is now plant processed and eviscerated. The live to eviscerated yield is the one that is considered by processors in calculating costs.

Yield Live to Eviscerated

		percent
<i>Chickens</i>	under 3 lb.	75
	3 lb. and over	73
<i>Fowl</i>		70
<i>Turkeys</i>	8 lb. and under	78
	over 8 lb. and under 16 lb.	81
	16 lb. and over	82
<i>Ducks</i>		71
<i>Geese</i>		72

Yield Dressed to Eviscerated

<i>Chickens</i>	under 3 lb.	87
	3 lb. and over	84
<i>Fowl</i>		81
<i>Turkeys</i>	8 lb. and under	89
	over 8 lb. and under 16 lb.	91
	16 lb. and over	91
<i>Ducks</i>		85
<i>Geese</i>		84

weight of carlot - 30,000 lb.

FRUITS

	Net weight in pounds	Number of units in carlot
APPLES		
barrel	135	215
box, cell pack, tray pack	42	900
bushel	45	525
crate	45	525
handi-pack, Junior box, B.C.	20	1,400
11 qt. open	14	-
6 qt. open	7	-
APRICOTS		
bushel	50	-
Vu-pack	15	1,700
lug	14.6	1,600
CHERRIES		
bushel	50	-
lug	25	800
display lug	15	1,400
4 basket crate	20	1,200
11 qt. flat	16	1,400
6 qt. heaped	10	2,100
6 qt. flat	8	2,400
CRABAPPLES		
box	38	800
11 qt.	14	1,400

Net weight
in pounds

Number of units
in carlot

PEACHES

bushel	50	-
4 basket crate	20	1,200
peach box	18	1,500
cell pack, Vu-pack	17	1,500
11 qt. flat	14	1,400
6 qt. 3 layer	10	-
6 qt. 2 layer	8	400-450

PEARS

bushel	50	-
box	42	800
junior box	22	1,400
11 qt. heaped	18	-
11 qt. flat	15	1,400
6 qt. heaped	11	2,100
6 qt. flat	8	2,400

PLUMS

bushel	50	-
lug	16	1,600
Vu-pack, handi-pak	17	1,600
4 basket crate	20	1,200
11 qt. flat	16	1,400
6 qt. flat	8	2,400

Net Weight in Pounds

	quart	2 qt. open	6 qt. flat	11 qt. flat	11 qt. open	flat or pail	bushel
Blackberries	1¼	-	-	-	-	-	-
Black currants	1¼	-	9	-	-	-	-
Blueberries	1¼	-	7	15	-	22	-
Gooseberries	1¼	-	8	-	-	-	-
Grapes	1¼	3	7	-	14	-	50
Loganberries	1¼	-	-	-	-	-	-
Raspberries	1¼	-	-	-	-	-	-
Red currants	1	-	7	-	-	-	-
Strawberries	1¼	-	-	-	-	-	-

Number of 6 quart Flats in Carlot

Blackberries	2,400
Loganberries	2,400
Raspberries	2,400
Strawberries	2,100

Pounds of Fresh Fruits Equivalent to One Pound

	Frozen	Canned	Dried	Juice
Apples	1.60 <i>sections</i>	1.70	10 <i>exports</i>	1.66
		1.40 <i>sauce</i>	8 <i>imports</i>	11.62 <i>concentrated</i>
Apricots		0.62	6	
Cherries		0.91 <i>pitted in syrup</i>		
		1.16 <i>sour pitted</i>		
		0.67 <i>unpitted</i>		
Crabapples		1.20		
Peaches	1.12	1.02		
Pears		1.12		
Plums		0.63		
Blueberries	1.05	0.67		
Loganberries	1.05	0.63		
Raspberries	1.05	0.58		
Strawberries	0.85 <i>with stems</i>	0.65		
	0.81 <i>hulled</i>			

VEGETABLES

	Net weight in pounds	Number of units in carlot
ARTICHOKES		
bushel	56	
ASPARAGUS		
eastern crate	12	1,200
western crate	19	
11 qt.	12	
6 qt.	7	
BEANS, SNAP		
bushel	32	
11 qt.	11	
6 qt.	8	
BEETS		
bushel, bag	50	600
dozen bunches	9	
CABBAGE		
bushel 8-10 heads	34	
crate, 10-14 heads	40	360
bag	50	
dozen	40	
head	3½	
CANTALOUPEs		
standard or jumbo crate	70	335
20 qt. open basket	24	900
flat	23	

	Net weight in pounds	Number of units in carlot
CARROTS		
bushel, bag	50	600
dozen bunches	12	
CAULIFLOWER		
bushel or crate and 9-12 heads	27	700
head	2½	
CELERY		
crate, 2½-5 doz.	65	360
CORN ON THE COB		
bushel	35	
crate W/B, 5 doz.	38	700
dozen	6	
CUCUMBERS		
bushel	50	
lug	25	
peach box	20	1,430
carton, 2 box	16	
11 qt. 2 doz.	16	
EGGPLANT		
bushel	33	
peach box	15	
20 qt. open	14	
LETTUCE		
bushel	18	
vacuum pack, 2 doz. carton	43	700
dozen	6	

	Net weight in pounds	Number of units in carlot
ONIONS		
bushel, bag	50	600
dozen bunches	4	
11 qt. pickling	17	
PARSLEY		
6 qt. 2 doz. bunches	3	
PARSNIPS		
bushel	45	
PEAS, GREEN		
bushel, <i>in the pod</i>	30	
bushel, <i>shelled</i>	50	
11 qt., <i>in the pod</i>	10	
6 qt., <i>in the pod</i>	6	
PEPPERS		
bushel	25	
peach box	8	
11 qt.	9	
6 qt.	5	
POTATOES		
barrel	165	
bushel	60 statutory	
bag	50 - 75 - 100	600 - 75 lb. bags
RADISHES		
dozen bunches	3	


	Net weight in pounds	Number of units in carlot
RHUBARB		
box, crate	42	600
carton	10	
dozen bunches	12	
SPINACH		
bushel	18	
TOMATOES		
bushel	60	
pear box, green	35	
Quebec box	30	
lug	30	750
4 basket crate	20	1,000
11 qt.	17	1,400
6 qt.	10	2,400
TURNIPS		
bushel	50	600
bag	20 - 50 - 100	
head	3	

Pounds of Fresh Vegetables Equivalent to One Pound


	Frozen	Canned	Dried	Other
Asparagus	2.17	0.79 <i>tips</i> 0.83 <i>cuttings</i>		
Beans, snap	1.43	0.77		
Beets		1.33		
Carrots	2.70	0.83		
Cauliflower	3.33			
Corn, on the cob	1.14	2.02 <i>not on cob</i>		
	3.33 <i>cut</i>			
Onions			11	
Peas, green	2.70 <i>unshelled</i> 1.05 <i>shelled</i>	0.70 <i>shelled</i>	0.70	
Potatoes	2.77 <i>french fried</i>	1.48	7.50	7.60 <i>flour</i> 9.00 <i>starch or instant</i>
Tomatoes		1.70		3.15 <i>pulp and puree</i> 5.75 <i>paste</i> 1.11 <i>juice</i>

CANNED FRUITS AND VEGETABLES


FRUITS: Net Weight in Pounds of One Dozen Cans

Size of cans 	15 fl. oz.	20 fl. oz.	28 fl. oz.	105 fl. oz.
Apples, liquid pack	11¼	-	-	78
Apples, solid pack	-	14½	21½	78
Crabapples	11½	15¾	22½	81
Applesauce	11½	15¾	22¼	85
Apricots	12½	16	23	88
Blueberries	11½	15½	21½	79
Cherries	11¾	15¾	22¼	85
Fruit cocktail	11½	15¾	23	82½
Grapefruit	-	15	21¾	78¼
Loganberries	12½	15½	22¼	82½
Peaches	11½	15¾	23	82½
Pears	11¼	15½	23	82
Pie filling, apple	12	15¾	22½	83
Pie filling, other	12	15¾	22½	83
Pineapple	12	15¾	22¼	85
Plums, gages	12	16	23	85
Raspberries	12	15¾	22¼	82½
Rhubarb	11¾	16¼	23	85
Strawberries	11½	16	22¼	82½
Other small fruits	12	15¾	22½	82½
All other fruits	12	15¾	22¼	82½

VEGETABLES: Net Weight in Pounds of One Dozen Cans

Size of cans 	15 fl. oz.	20 fl. oz.	28 fl. oz.	105 fl. oz.
Asparagus	-	15	-	77
Beans, green or wax	11½	15½	22¾	85
Beans, baked	12	16	23	85
Beans, lima	11½	15½	22¾	82½
Beets	11¼	15½	22¾	80
Carrots	11¼	15½	22¾	79½
Carrots and peas	11½	15	22¾	80½
Corn	11½	15½	23	82
Mixed vegetables	11½	15¼	22¾	80½
Peas	11½	15½	23	82
Pumpkin and squash	11½	15	22½	79
Spinach	11	14½	21	74
Tomatoes	11¼	15¼	22½	78
All other vegetables	11¼	15	22	79

OTHER PRODUCTS: Net Weight in Pounds of One Dozen Cans

Size of cans 	10 fl. oz.	15 fl. oz.	20 fl. oz.	28 fl. oz.	105 fl. oz.
Fruit juice, apple	-	12	15½	21	85
Fruit juices, other	8¼	-	14½	-	80
Jams	-	-	-	-	-
Jellies	-	-	-	-	-
Marmalades	-	-	-	-	-
Pickles	8½	11¼	15	21	78
Relishes and sauces	7½	-	15½	-	79
Ready dinners, stews, etc.	8½	11½	15¼	21½	-
Sauerkraut	-	11¼	15	21½	74
Soups, all kinds	8	-	15	21	79
Spaghetti	9	12½	15½	22¼	82½
Tomato juice	8	11¼	15	21	78¾
Tomato catsup	-	-	16¾	22	79
Tomato pulp, paste and puree	-	-	-	21½	79

GRAINS AND GRAIN PRODUCTS

GRAINS

Statutory Weight per Bushel

	pounds
Wheat	60
Oats	34
Barley	48
Rye	56
Corn	56
Buckwheat	48
Mixed Grains	
Eastern	40 ¹
Western	50 ¹
Peas	60
Beans	60

¹Non-statutory, conventional only.

GRAIN PRODUCTS

	Extraction rate ¹	Yield per bushel	Weight of barrel	Grain to 100 pounds of product
	percent	pounds	pounds	bushels
Wheat flour	73.7	44.2	196	2.3
Oatmeal	53.8	18.3	196	5.5
Rolled oats	53.8	18.3	180	5.5
Barley pot and pearl	39.4	18.9	196	5.3
Malt	75.0	36.0	-	2.8
Rye meal and flour	67.7	37.9	196	2.6
Corn flour and meal	59.0	33.1	196	3.0
Buckwheat flour	56.0	26.9	196	3.7
Pea split	70.0	42.0	-	2.4

¹Five year averages 1956-57 to 1960-61 from data submitted by millers and malsters to D.B.S.

OILSEEDS AND OILSEED PRODUCTS

SOURCES Reports from Canadian processors. Five-year averages 1956-57 to 1960-61 except mustard seed, 1954-55 to 1958-59 (crop year is August-July). The averages per short ton represent conventional or accepted volume – weight standards, as defined by the Grain Research Laboratory of the Board of Grain Commissioners.

OILSEEDS

Statutory Weight per Bushel and Average Volume per Short Ton

	pounds	cubic feet
Flaxseed	56	45.9
Soybeans	60	42.8
Rapeseed	50	51.4
Sunflower seed	30	85.7
Mustard seed	-	51.4

OILSEED PRODUCTS

	Extraction rate	Yield per bushel	Weight of gallon	Average per short ton
	percent	pounds	pounds	cubic feet
Flaxseed, crude oil	35.4	19.8	9.3	34.4
linseed oil	61.7	34.6	-	-
Soybeans, crude oil	17.7	10.6	9.2	34.7
meal	78.8	47.3	-	-
Rapeseed, oil	36.2	18.1	9.1	35.0
meal	60.2	30.1	-	-
Sunflower seed, oil	26.5	8.0	9.2	34.6
meal	31.0	9.3	-	-
Mustard seed, oil	19.0	-	-	35.0
meal	70.0	-	-	-

FORAGE AND GRASS SEEDS

Statutory Weight per Bushel

	pounds
Alfalfa	60
Bluegrass	18
Bromegrass	14
Clover (alsike, red, white crimson, sweet)	60
Crested wheatgrass	22
Fescue	22
Millet seed (foxtail type)	48
Millet seed (proso type)	50
Orchard grass	14
Ryegrass	20
Slender wheatgrass	14
Timothy	48
Vetch	60
Western ryegrass	14

Source: Inspection and Sale Act, 1938.

SUGAR AND SYRUPS

SUGAR BEETS

100 lb. sugar beets	16 lb. sugar content ¹ 13 lb. granulated white sugar ¹
100 lb. granulated white sugar	769 lb. sugar beets 107 lb. raw cane sugar (96° polarization) ²
100 lb. raw cane sugar (96° polarization)	93 lb. granulated white sugar ²
100 lb. granulated white sugar from sugar beets	107 lb. raw sugar value

¹Based on the 1951-60 weighted average from data supplied to the Agricultural Stabilization Board on production in Ontario, Manitoba and Alberta.

²Based on traditional relationships used in industry.

MAPLE PRODUCTS

1-gal. syrup (13 lb. 2 oz.)	10 lb. sugar
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TOBACCO

Average yield per 100 lb. green	to redried	to stemmed
Flue-cured	90	68
Burley	87	65
Dark-air	87	65
Dark-fire	97	-
Dark-combined	92	-
Cigar, domestic	94	60
Cigar, imported	-	70
Pipe	96	70

Note: Conversion factors reviewed by Imperial Tobacco Company of Canada, Limited, as of August 1961.

WEIGHT EQUIVALENTS OF SELECTED COMMODITIES

WHEAT, SOYBEANS, POTATOES

1 bushel	0.2721 quintal
	0.5357 long hundredweight
	0.02731 metric ton
1 long hundredweight	1.8667 bushels
1 long ton	37.33 bushels
1 short ton	33.33 bushels
1 metric ton	36.744 bushels
1 quintal	3.674 bushels
1 bushel per acre	0.67 quintal per hectare
1 quintal per hectare	1.49 bushels per acre

OATS

1 bushel	0.1542 quintal
	0.3036 long hundredweight
	0.01542 metric ton
1 long hundredweight	3.2941 bushels
1 long ton	65.88 bushels
1 short ton	58.82 bushels
1 metric ton	64.842 bushels
1 quintal	6.484 bushels
1 bushel per acre	0.38 quintal per hectare
1 quintal per hectare	2.62 bushels per acre

BARLEY

1 bushel	0.2177 quintal 0.42286 long hundredweight 0.02177 metric ton
1 long hundredweight	2.3333 bushels
1 long ton	46.66 bushels
1 short ton	41.66 bushels
1 metric ton	45.930 bushels
1 quintal	4.593 bushels
1 bushel per acre	0.54 quintal per hectare
1 quintal per hectare	1.86 bushels per acre

RYE, CORN, FLAXSEED

1 bushel	0.254 quintal 0.5 long hundredweight 0.0254 metric ton
1 long hundredweight	2.00 bushels
1 long ton	40.00 bushels
1 short ton	35.71 bushels
1 metric ton	39.368 bushels
1 quintal	3.9368 bushels
1 bushel per acre	0.63 quintal
1 quintal per hectare	1.59 bushels per acre

CANADIAN – METRIC CONVERSIONS

AREA

1 hectare	2.47109 acres 0.00386 square mile
1 square kilometer	0.38610 square mile
1 acre	0.40468 hectare
1 square mile (640 acres)	259 hectares 2.59 square kilometers
1 arpent	0.871 acre

WEIGHT

1 kilogram	2.2046 pounds
1 quintal (100 kg.)	220.46 pounds
1 metric ton (1,000 kg.)	2204.622 pounds 22.046 short hundredweights 19.684 long hundredweights 1.10231 short tons 0.98420 long ton
1 pound	0.45359 kilogram
1 short hundredweight (100 lb.)	0.045359 metric ton
1 long hundredweight (112 lb.)	0.050802 metric ton
1 short ton (2,000 lb.)	0.90718 metric ton
1 long ton (2,240 lb.)	1.01605 metric tons

LINEAR MEASURE

1 inch	0.025 meter
1 foot	0.305 meter
1 yard	0.914 meter
1 mile	1609.15 meters

LIQUID MEASURE

1 liter	0.87988 Imperial quart 1.05668 U.S. quarts 0.21998 Imperial quart 0.26417 U.S. gallon
1 hectoliter (100 l.)	21.998 Imperial 26.417 U.S. gallons
1 Imperial quart	1.13649 liters
1 U.S. quart	0.94633 liter
1 Imperial gallon	4.54596 liters
1 U.S. gallon	3.78533 liters

CANADIAN – UNITED STATES CONVERSIONS

DRY MEASURE

1 U.S. bushel	0.9689 Imperial bushel
1 Imperial bushel	1.0321 U.S. bushels

LIQUID MEASURE

1 U.S. quart or gallon	0.83267 Imperial quart or gallon
1 Imperial quart or gallon	1.20095 U.S. quarts or gallons
1 U.S. pint	16 fluid ounces
1 Imperial pint	20 fluid ounces

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