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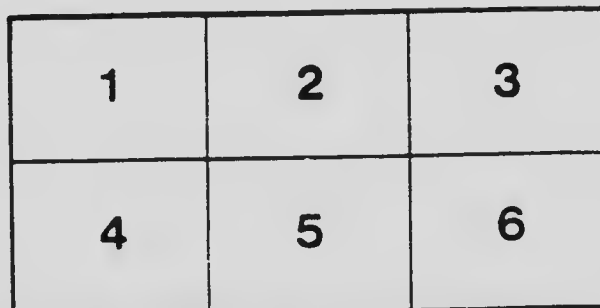
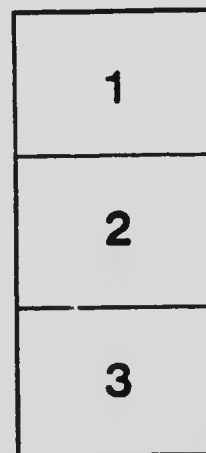
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O. H. M. S.

W. J. Gerald
Deputy Minister.

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA.

—
BULLETIN No. 178
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SPIRIT OF CAMPHOR (SPIRITUS CAMPHORÆ)

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA.

BULLETIN No 178.

SPIRIT OF CAMPHOR (SPIRITUS CAMPHORÆ)

OTTAWA, March 26, 1909.

WM. HUMSWORTH, Esq.,
Acting Deputy Minister of Inland Revenue.

SIR,—I beg to hand you herewith a report upon seventy-four (74) samples of spirit of camphor, purchased throughout Canada in January of this year.

The collection was made in consequence of some complaints to the effect that this article was offered with so weak a spirit strength as to make it useless for the purposes to which it is applied by physicians and the public.

The present examination has regard solely to the spirit-strength of the alcohol used. It is intended, in the course of the coming year, to make another collection, in which the content of camphor, and the nature of the alcohol employed as a solvent will be determined.

The British Pharmacopœia prescribes spiritus rectificatus (90 per cent. alcohol) as the proper solvent for preparation of spirit of camphor. This spirit has a specific gravity 0·834; and the resulting spirit of camphor is required to have a specific gravity varying between 0·843 and 0·847. There is an increase of volume of approximately 10 per cent. on dissolving camphor in alcohol, according to pharmacopœal directions for preparation of spirit of camphor. Allowance being made for this increase of volume, the finished spirit of camphor represents an alcoholic solution containing practically 81 per cent. by volume of alcohol.

Reasonable allowance being made for loss of alcohol due to evaporation during manufacture and the opening of bottles in dispensing, I have considered it right to pass all samples showing over 75 per cent. by volume of alcohol. This amount of alcohol is sufficient to retain in solution the whole of the camphor used in the manufacture of pharmacopœal spirit of camphor.

Twelve samples show less than 75 per cent. of alcohol. Of this number eight (8) samples contain above 70 per cent. and may be regarded rather as doubtful, than as actually adulterated, in the sense of having been made with less spirit than the pharmacopœia requires. Four (4) samples, are distinctly too low in spirit, and must be regarded as adulterated under the Act. These are:—

No. 36810	containing	54·08	per cent	Alcohol.
" 36812	"	56·72	"	"
" 937	"	58·60	"	"
" 22903	"	60·84	"	"

This is the first occasion of inspecting spirit of Camphor ; and as it is purposed to institute another inspection, in the course of which a more detailed study of the article will be undertaken, it may be considered rather satisfactory than otherwise, that I am able to report an adulteration of less than 5.5 per cent.

I beg to recommend the publication of this report as Bulletin No. 178.

I have the honour to be, sir,

Your obedient servant,

A. MCGILL,

Chief Analyst.

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BULLETIN No. 178—SPIRIT OF CAMPHOR—(SPIRITUS CAMPHORÆ)

Date of Collection	Nature of Sample	No. of Sample	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	Inspector's Report.	RESULTS OF ANALYSIS	
			Quantity.	Cents.			Sq. Gr. Distillate to 4 Vols.	Alcohol by Volume.
1909.								
Jan. 12	Spirit of Camphor...	33831	Buckley Bros., Halifax, N.S.	4 oz. 35	Vendors		0.9754	83.20
" 1	"	33832	A. A. Thompson, Halifax, N.S. 4 "	25	Vendor		0.9751	84.36
" 19	"	33833	H. E. Wilson, Halifax, N.S.	30	"		0.9756	82.44
" 20	"	33834	W. F. Odell, Truro	30	"		0.9749	85.16
" 20	"	33835	Hub. Drug Store, Truro	40	"		0.9755	82.84

DISTRICT OF NOVA SCOTIA—R. J. WAUGH, INSPECTOR.

DISTRICT OF PRINCE EDWARD ISLAND—THEO. MOORE, INSPECTOR.

Jan. 7	Spirit of Camphor...	31448	A. W. Reddin, Charlottetown	4 oz. 40	Vendors		0.9761	80.60
" 7	"	31449	G. E. Hughes, Charlottetown	4 " 40	"		0.9750	84.76
" 7	"	31450	Johnson & Johnson, Charlotte town.	4 " 40	"		0.9763	79.84
" 11	"	31451	A. W. P. Gourlie, Summerside	4 " 45	"		0.9784	71.24
" 12	"	31452	Edgar Keir, Kensington	4 " 40	"		0.9751	84.36

DISTRICT OF NEW BRUNSWICK J. C. FERGUSON, INSPECTOR.

Jan. 11	Spirit of Camphor	29882	George A. Moore, St. John, N.B.	4 oz.	40	Vendor	0 9751	84 36
" 16	"	29883	A. J. Ryan, Fredericton, N.B.	4 "	20	"	0 9757	82 08
" 18	"	29884	Garden Bros., Woodstock	4 "	20	"	0 9751	84 36
" 25	"	29885	Sussex Mercantile Co., Ltd	4 "	45	C. H. Fairweather, Dispenser, Sussex Mercantile Co.	0 9751	84 36
" 27	"	29886	A. E. Shaw, Newcastle, N.B.	4 "	20	A. E. Shaw, Newcastle, N.B.	0 9756	82 44

DISTRICT OF QUEBEC—E. BELAND, INSPECTOR.

Jan. 11	Spirit of Camphor	36808	A. Martineau, 734 St. Valier St., Quebec.	4 oz.	25	Vendor	0 9749	85 16
" 11	"	36809	Jos. Masson, 808 St. Valier St., Quebec.	4 "	25	"	0 9763	79 84
" 12	"	36810	G. Y. Plamondon, 122 St. Joseph St., Quebec.	4 "	25	"	0 9829	54 08
" 12	"	36811	F. C. Lachevrotiere, 224 St. John St., Quebec.	4 "	40	"	0 9734	86 85
" 12	"	36812	C. P. Delisle, 379 1/2 St. John St., Quebec.	4 "	25	"	0 9822	56 72

DISTRICT OF ST. HYACINTHE—J. C. ROULEAU, INSPECTOR.

Jan. 11	Spirit of Camphor	935	Pharmacie Larochelle	4 oz.	20	Vendor	0 9764	77 48
" 13	"	936	Dr. Bedard, Drummondville	4 "	30	"	0 9761	80 60
" 19	"	937	Dr. C. P. Verlon, Granby	4 "	35	"	0 9817	58 60
" 19	"	938	Dr. Demers, Farnham	4 "	35	Lyman Knox, Montreal	0 9761	86 60
" 26	"	939	Dr. Guy, St. Jean, Que.	4 "	40	Vendor	0 9757	82 08

BULLETIN No. 178—SPIRIT OF CAMPHOR—(SPIRITUS CAMPHORE).

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	Inspector's Report.	RESULTS OF ANALYSIS.	
				Quantity.	Cents.			Spc. Gr. Distillate to 4 Vols.	Alcohol by Volume.
Jan. 5	Spirit of Camphor...	32671	E. Gagnon, 93 St. Valier Ville, 4 oz. St. Louis, P.Q.	4 oz.	35	Vendor		0.9778	73.92
" 5	"	32672	H. R. Huot, 68 Laurier Av., St. Louis, P.Q.	4 "	45	"		0.9746	46.36
" 11	"	32673	James Fortune, Huntington, P.Q.	4 "	30	"		0.9766	78.72
" 14	"	32674	Dr. J. B. Martin, 212 St. Joseph St., Lachine, P.Q.	4 oz.	40	"		0.9742	87.96
" 22	"	32675	G. H. Christie, Lachine.....	4 "	30	"		0.9742	87.96

DISTRICT OF MONTREAL—J. J. COSTIGAN, INSPECTOR

DISTRICT OF OTTAWA—J. A. RICKY, INSPECTOR

Jan. 8	Spirit of Camphor...	22901	W. G. Bolster, Chesterville.....	4 oz.	40	Vendor	Sold as Spirit of Camphor after purchase of sample Vendor said it was made with Columbian Spirit.	0.9782	72.12
" 12	"	22902	D. A. Muirhead, Carleton Place	4 "	30	"	Sold as Spirit of Camphor	0.9761	80.60
" 13	"	22903	Chas A. Adams, Kempville.....	4 "	30	McLennan, Kempville.....	"	0.9811	60.84
" 19	"	22904	J. A. Murgrove, Ottawa.....	4 "	45	Vendor	"	0.9772	76.32
" 20	"	22905	The Modern Pharmacy, Hull, P.Q.	4 "	40	"	"	0.9740	83.72

DISTRICT OF KINGSTON—JAS. HOGAN, INSPECTOR.

Jan.	8 Spirit of Camphor...	39431	W. W. Gibson, Kingston.....	4 oz.	40	Vendor.....	0 9758	81 72
"	"	39432	D. Bleeker, Belleville.....	4 "	30	"	0 9760	80 96
"	"	39433	A. L. Gun, Belleville.....	4 "	20	"	0 9751	84 36
"	"	39434	W. J. Davison, Port Hope.....	4 "	33	"	0 9758	81 72
"	"	39435	McDermid & Jary, Peterboro.....	4 "	40	Vendors.....	0 9760	80 96

DISTRICT OF TORONTO—H. J. DAGER, INSPECTOR.

Jan.	8 Spirit of Camphor...	36177	M. E. Vanzant, Ltd., Toronto.....	4 oz.	35	Vendors.....	0 9747	85 96
"	"	36178	Littlewoods Pharmacy, Hamilton	4 "	35	Vendor.....	0 9749	85 16
"	"	36179	F. W. Mill, Hamilton.....	4 "	35	"	0 9745	86 76
"	"	36180	Walker & Co., St. Catharines.....	4 "	35	Vendors.....	0 9747	85 96
"	7	36181	The T. Eaton Drug Co., Ltd., Toronto.	4 "	30	"	0 9750	84 76

DISTRICT OF LONDON—T. KIDD, INSPECTOR.

Jan.	6 Spirit of Camphor...	30556	H. O. Dauloy, Goderich, O.....	4 oz.	40	Vendor.....	0 9742	87 96
"	"	30568	W. S. R. Holmes, Clinton, O.....	4 "	40	Not known.....	0 9745	86 76
"	"	30578	E. A. Rea, Stratford.....	4 "	40	Vendor.....	0 9754	83 20
"	"	30588	J. D. McKee, Guelph.....	4 "	40	"	0 9746	80 96

BULLETIN No. 178—SPIRIT OF CAMPHOR—(SPIRITUS CAMPHORE).

Date of Collection.	Nature of Sample.	No. of Sample	Name and Address of Vendor.	Cost.		Inspector's Report.	RESULTS OF ANALYSIS.	
				Quantity.	Cents.		Sp. Gr. Distillate to 4 Vols.	Alcohol by Volume.

DISTRICT OF WINDSOR—JAS. TALBOT, INSPECTOR.

Jan. 7	Spirit of Camphor...	34735	H. Robertson, Sarnia.....	4 oz.	40	Vendor.....	0.9737	89.84
" 7	"	34739	Peter McGibbon, Sarnia.....	4 "	25	"	0.9762	80.24
" 8	"	34743	W. H. Dale, Petrolia.....	4 "	50	"	0.9747	85.96
" 11	"	34750	G. Ineson, Ingersoll.....	4 "	40	"	0.9749	85.16
" 11	"	34751	F. G. Walley, Ingersoll.....	4 "	40	"	0.9786	70.86

DISTRICT OF MANITOBA—A. C. LARIVIERE, INSPECTOR.

Jan. 13	Spirit of Camphor...	35821	Morrison's Drug Store, Virden, M.....	4 oz.	40	Vendor.....	0.9755	82.84
" 14	"	35822	E. W. Bailey, Hartney, M.....	4 "	40	"	0.9740	85.16
" 19	"	35823	Millers Pharmacy, Shoal Lake.....	4 "	35	Not known.....	0.9748	85.56
" 19	"	35824	H. K. Clatway, Shoal Lake.....	4 "	35	Vendor.....	0.9750	84.76
" 21	"	35825	F. L. Brown, Winnipeg.....	4 "	30	"	0.9773	75.92

DISTRICT OF CALGARY—R. W. FLETCHER, INSPECTOR

Jan. 15	Spirit of Camphor.	35382	W. McLean, Calgary.	4 oz.	25	Vendor.	0-9743	87.56
" 22	"	35383	B. F. Sauch, Medicine Hat.	4 " "	50	"	0-9749	85.16
" 22	"	35384	E. M. Cawner, Medicine Hat.	4 " "	50	"	0-9767	78.76
" 22	"	35385	C. T. Pringle, Medicine Hat.	4 " "	50	"	0-9775	74.72
" 26	"	35386	Esdalee Drug Store, Calgary.	4 " "	40	"	0-9781	72.56

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DISTRICT OF VANCOUVER—J. F. POWER, INSPECTOR.

Jan. 20	Spirit of Camphor.	37566	Marett, Reid, Vancouver.	4 oz.	50	Vendors	0-9743	87.56
" 29	"	37567	Heroog & Strachan, Vancouver.	4 " "	40	"	0-9746	86.36
" 29	"	37568	L. Henderson, Vancouver.	4 " "	30	Vendor.	0-9760	80.96
" 29	"	37569	Nelsons Drug Store, Vancouver.	4 " "	30	"	0-9786	70.36
" 29	"	37570	City Drug Store, Vancouver.	4 " "	60	"	0-9776	74.72

DISTRICT OF VICTORIA—D. OSULLIVAN, INSPECTOR.

Jan. 26	Spirit of Camphor.	39289	Dean & Hiscocks, Victoria.	4 oz.	50	Vendors	0-9754	83.20
" 26	"	39290	Hall & Co., Victoria.	4 " "	40	"	0-9737	89.84
" 26	"	39291	W. Jackson & Co., Victoria.	4 " "	35	"	0-9743	87.56
" 27	"	39292	W. S. Perry, Victoria.	4 " "	40	Vendor.	0-9759	77.96
" 27	"	39293	F. J. Williams, Victoria.	4 " "	50	"	0-9752	83.96

