

PHARMACEUTICAL FORMULAS

PROPOSED FOR A. PH. A. RECIPE BOOK

Thus far a collection of 114 Pharmaceutical Formulas has been compiled and published in *THE JOURNAL*, Vol. I, pp. 169, 366, 505, 637, 760 and 1307 (Feb. to Nov. 1912). Beginning with the March 1916 number these Formulas will be continued in monthly instalments by the Committee, and *all* members of the American Pharmaceutical Association are earnestly requested to render assistance by sending suitable formulas and criticisms to the Chairman, OTTO RAUBENHEIMER, Brooklyn, N. Y.

Contributed by Wm. Gray, Presbyterian Hospital, Chicago:

No. 218.

FORTIFIED CASTOR OIL.

Croton Oil 1 drop
Castor Oil 4 mils

At one dose.

No. 219.

BLACK DYE FOR SILKWORM-GUT SUTURE.

Extract of Logwood 20 Gm.
Copper Sulphate 8 Gm.
Distilled Water 1000 mils

Boil the white silkworm-gut in sterile water for 30 minutes. After bringing the dye to the boiling point, add the gut and boil for 5 minutes.

Preserve in 95 percent alcohol.

No. 220.

MORHAM'S PLUG.

Sesame Oil,
Paraffin, of each 40 Gm.
Iodoform 20 Gm.

No. 221.

GELATIN BONE PLUG.

Gelatin 30 Gm.
Water 30 mils
Glycerin 40 mils

Just before using add 2 percent of solution of formaldehyde. This is the formula of a world-famous surgeon.

No. 222.

HORSLEY'S WAX.

Yellow Wax 7 Gm.
Expressed Oil of Almond 1 mil
Salicylic Acid 1 Gm.

Mix at a very gentle heat. Used in brain operations.

No. 223.

UNG. BALSAMI PERUVIANI COMP.

"Bed-sore Ointment."

Balsam of Peru 10 Gm.
Zinc Oxide 40 Gm.
Castor Oil 50 Gm.

Mr. Gray thinks that this is the best-known treatment for bed-sores.

No. 224.

UNG. CAMPHO-PHENO COMP.

Camphor,
Phenol, of each 16 Gm.
Zinc Oxide,
Petrolatum, of each 240 Gm.

Triturate the camphor and phenol until liquefied and gradually add the mixture of petrolatum and zinc oxide.

A very efficacious remedy for hemorrhoids.

No. 225.

SPLENDID OINTMENT BASE.

White Wax 20 Gm.
Liquid Petrolatum 70 Gm.
Rose Water 30 mils
Sodium Borate 1 Gm.

Follow directions in Formula No. 116 (J.A.P.H.A., March, 1916, p. 309).

No. 226.

ABSORBENT COLD CREAM.

Spermaceti,
White Wax, of each 30 Gm.
Expressed Oil Almond 240 Gm.
Oil of Rose 1 mil
Oil of Patchouli 1 drop
Sodium Borate 0.3 Gm.
Distilled Water 80 mils

Follow directions in Formula No. 116.

No. 227.

THEATRICAL COLD CREAM.

White Wax 100 Gm.
 Ceresin 100 Gm.
 Liquid Petrolatum 400 Gm.
 Sodium Borate 8 Gm.
 Distilled Water 175 mils
 Perfume, a sufficient quantity.

Follow directions in Formula No. 116.

Ceresin is a hard paraffin, melting point about 55° C. It is prepared by purifying ozokerite, or earth wax, a natural mineral wax found in Galicia.

The cheaper ceresin replaces the spermaceti in Formula No. 116 and thus lessens the cost of the cold cream.

No. 228.

KIETH'S MIXTURE.

Heavy Magnesium Oxide 8 Gm.
 Magnesium Sulphate 24 Gm.
 Glycerin 30 mils
 Mucilage of Acacia 30 mils
 Peppermint Water, a sufficient quantity,

To make 180 mils

This is a famous Scotch preparation and is used as a stomachic.

Dose: 4 to 8 mils as necessary.

No. 229.

LAMBERT TREATMENT.

(For Drug and Alcohol Addiction.)

Fluidextract of Hyoscyamus 15 mils
 Fluidextract of Xanthoxylum 15 mils
 Tincture of Belladonna (15 percent) 30 mils

Dose: Begin with 6 to 8 minims every hour, or until some signs of belladonna intoxication are observed. Every 6 hours increase the specific 2 minims until 14 or 16 minims are being taken every hour, but do not exceed 16 minims. If signs of belladonna intoxication are noticed, such as dilated pupils, dryness of throat, red rash, or a rapidity of speech, or sometimes the beginning of delirium, then the specific must be stopped. When these symptoms have subsided, then begin again in 8 minim doses.

Some patients are very susceptible to belladonna and may have to start with 4 minims. (J.A.M.A., Sept. 25, 1909, p. 985.)

No. 230.

ZENKER'S FLUID.

Potassium Dichromate 50 Gm.
 Mercuric Chloride 100 Gm.
 Sodium Sulphate 20 Gm.
 Water 2000 mils

Add 5 mils of acetic acid to each 100 mils of above solution at the time of using, as the finished solution decomposes readily.

Used by pathologists to fix and harden tissue and to prevent breakdown of structure. (Delafield & Prudden, Physiology, p. 1030.)

No. 231.

COMPOUND SOLUTION OF THORIUM.

(For cystoscopic use.)

Thorium Nitrate 100 Gm.
 Solut. Sodium Citrate (50 percent). 300 mils
 Solut. Sodium Hydroxide (15 percent), a sufficient quantity,
 Distilled Water, a sufficient quantity,

To make 1000 mils

Make a hot saturated solution of thorium nitrate and gradually add the sodium citrate solution in small portions, shaking very thoroughly after each addition. At first a white, gummy precipitate is formed, which becomes granular and finally dissolves when all of the sodium citrate solution is added.

Now neutralize with solution of sodium hydroxide and finally add sufficient distilled water to make 1000 mils.

Contributed by John K. Thum, German Hospital, Philadelphia:

PHYSIOLOGICAL SOLUTIONS.

The U.S.P. IX contains the formula of such a solution under the title of Liquor Sodii Chloridi Physiologicus, Physiological Salt Solution, Normal Saline Solution.

Besides this, a number of other formulas are in use, which are herewith published. Let it be thoroughly understood these solutions must always be sterilized. This is easily accomplished by boiling in a chemical flask for at least one-half hour. Every precaution must

be taken that no contamination takes place after the sterilization. Too much stress cannot be laid on these points.

No. 232.

RINGER'S SOLUTION

Sodium Chloride	9.00 Gm.
Potassium Chloride	0.42 Gm.
Calcium Chloride	0.24 Gm.
Sodium Bicarbonate	0.20 Gm.
Distilled Water, a sufficient quantity,	

To make1000 mls

Also used for perfusing surviving organs, especially the heart.

No. 233.

LOCKE'S SOLUTION

Sodium Chloride	9.00 Gm.
Potassium Chloride	0.25 Gm.
Calcium Chloride	0.23 Gm.
Sodium Bicarbonate	0.20 Gm.
Glucose	1.00 Gm.
Distilled Water, a sufficient quantity,	

To make 1000 mls

Sometimes ordered without glucose. The latter, which is not essential to the action of the irrigating fluid, is said to increase its efficiency. Therefore it might be named a heart food. •

(See Howell's Physiology, p. 562.)

No. 234.

ADLER'S SOLUTION.

Sodium Chloride	0.5900 Gm.
Sodium Bicarbonate	0.3510 Gm.
Potassium Chloride	0.0400 Gm.
Calcium Chloride	0.0400 Gm.
Magnesium Chloride	0.0250 Gm.
Monobasic Sodium Phosphate.	0.0126 Gm.
Glucose	0.1500 Gm.
Distilled Water, a sufficient quantity,	

To make1000 mls

This solution closely approximates the blood serum in its constitution, and provides a mechanism for maintaining its reaction and for neutralizing acids and alkalis.

Contributed by Wm. Gray, Presbyterian Hospital, Chicago:

No. 235.

FISCHER'S SOLUTION.

Sodium Carbonate, crystals	10 Gm.
Sodium Chloride	14 Gm.
Distilled Water, a sufficient quantity,	

To make 1000 mls

The distilled water should be redistilled in Jena glass. This solution is for intravenous use.

Contributed by the Chairman:

LUTES AND CEMENTS.

These are soft and adhesive compounds, used for joining different pieces of apparatus, so as to exclude air or to prevent loss of liquid or vapor. Lutes are temporary preparations, and cements are more permanent ones.

Prof. S. S. Sadtler of Philadelphia contributed an excellent paper on this subject at the Baltimore meeting of the American Institute of Chemical Engineers, from which the following formulas are taken, as pharmacists in general should become acquainted with some of the type preparations.

(*Sc. Am. Suppl.*, No. 2104.)

WATER-PROOF.

No. 236.

Boiled linseed oil thickened with clay, asbestos, red or white lead, etc., makes a water-proof lute.

No. 237.

Ground flaxseed made into a stiff paste with water is useful as a lute for steam connections, and is easily applied.

Flaxseed meal when added to the water in a radiator will also stop leaks.

OIL-PROOF.

No. 238.

Glue	2 parts
Glycerin	1 part
Water	7 parts

Soften the glue with the water, then liquefy by heat, and add the glycerin. This lute renders corks vacuum tight and stops small leaks of almost anything, except water and steam.

No. 239.

LITHARGE CEMENT.

Glycerin	90 mils
Water	10 mils
Litharge	90 Gm.
Red Lead	10 Gm.

Mix the liquids and thoroughly incorporate the solids to make a stiff putty.

This is one of the best lutes, and is impervious to water, oils and other liquids. Very useful as a "peste cement."

It takes several hours to stiffen and about a day to set completely.

No. 240.

Solution of Sodium Silicate, about 30° Bé.

Make into a stiff putty with whiting or barium sulphate. When magnesium carbonate is used the setting is so quick that it is hard to employ the mixture.

ACID-PROOF.

No. 241.

Litharge	80 Gm.
Red Lead	8 Gm.
Asbestos, ground	10 Gm.
Boiled Linseed Oil, a sufficient quantity.	

This lute will even stand nitric acid vapors.

No. 242.

BLACK PUTTY.

China Clay,	
Linseed Oil,	
Gas Tar, equal parts.	

Mix intimately.

No. 243.

CHLORINE RESISTANT.

Portland Cement,	
Powdered Glass,	
Solution Sodium Silicate, equal parts.	

The solution should be considerably diluted with water, so as not to set too fast.

PLASTER-OF-PARIS CEMENTS.

No. 244.

According to Sigmund Lehner, the addition of a little borax to the water regulates the setting of plaster and produces hard cements. A mixture of 12 water and 1 saturated solution of borax sets the plaster in 15 minutes. A mixture of 8 and 1 sets in one hour.

No. 245.

MARINE GLUE.

Crude Rubber	1 part
Shellac	2 parts
Pitch	3 parts

Dissolve the rubber in carbon disulphide or oil of turpentine and carefully mix with the other ingredients previously melted.

This lute is applied warm to crevices, etc., and becomes firm, but not brittle when cold.

No. 246.

MACHINISTS' CEMENT.

This consists of white lead or red lead mixed with linseed oil. A more tenacious cement can be obtained by the addition of Rubber or Gutta-Percha..... 1 part
Linseed Oil 6 parts

Dissolve the rubber or gutta-percha in sufficient carbon disulphide to produce the consistency of molasses, then mix with the oil and expose the mixture to the air for about 24 hours.

The red lead is added to form a putty. Iron oxide produces a superior cement, which is less brittle.

LEATHER CEMENTS.

No. 247.

American Isinglass,
Glue, equal parts.

Soften in water for 10 hours and boil with tannic acid until the mass is sticky.

The surface of the joint should be roughened and the cement should be applied hot.

No. 248.

Gutta-Percha	8 parts
Pitch	1 part
Shellac	1 part
Olive Oil	1 part

Melt together.