

A Table Showing the Result of Triturating Certain Substances Together.

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Certain solid substances when triturated together produce liquids, sometimes due to the formation of new compounds, sometimes forming hygroscopic mixtures. Following is a table for ready reference showing whether any two substances mentioned therein will, when rubbed together, form a liquid or not. In the experiments equal weights of the two chemicals were taken. Unless the mixture showed some appearance of becoming sticky or liquid within a few minutes the result was put down as a powder.

Abbreviations: P. = Dry Powder. L. = Liquid. D.P. = Damp Powder. P.M. = Pasty Mass.

1 = Some authorities state that a liquid or pasty mass results, but in the experience of the writer such is not the case. On rubbing antipyrin with chloral hydrate a very slight stickiness was noticed at first, but this quickly disappeared on continued rubbing.

2 = Liquefies on standing. 3 = Dries on standing.

4 = Carbolic acid in a damp atmosphere absorbs enough moisture to liquefy. Perhaps some of the results are due to this property, and also to the heat produced in the trituration.

5 = Resin, when powdered alone and rubbed hard, has a tendency to make an adhesive mass; but unless the agent with which it was triturated exerted some influence, the result was put down as a dry powder.

	Acetanilid.	Antipyrin.	Beta-Naphthol.	Camphor.	Camphor Monobromated.	Chloral Hydrate.	Exalgine.	Menthol.	Methacetin.	Naphthalin.	Phenacetin.	Phenol. ₄	Pyrogallol.	Resin. ₅	Resorcin.	Salicylic Acid.	Salol.	Sodium Salicylate.	Thymol.	Urethane.
Acetanilid.....	P	P ¹	P	P	P	D.P. ³	P	P	P	P	P	L	P	P	D.P. ²	P	P	P	L	P
Antipyrin.....	P ¹	P	L	P	P	P ¹	P	P	P	P	P	L	P.M. ³	P	P.M. ²	P ¹	D.P. ³	P ¹	L	L
Beta-Naphthol.....	P	L	P	L	P	P	L	L	P	P	P	L	P	P	P	P	P	P	P	L
Camphor.....	P	P	L	P	P	L	P	L	P	P	P	L	L	P	L	P	L	P	L	L
Camphor Monobromated.....	P	P	P	P	P	L	P	P	P	P	P	L	P	P	P	P	L	P	L	P
Chloral Hydrate.....	D.P. ³	P ¹	P	L	L	P	L	L	L	P	L	L	P	P	P	P	L	P	L	L
Exalgine.....	P	P	L	P	P	L	P	L	P	P	P	L	L	P	L	L	L	P	L	L
Menthol.....	P	P	L	L	P	L	L	P	P	P	P	L	L	L	L	P	P	P	L	L
Methacetin.....	P	P	P	P	P	L	P	P	P	P	P	L	P	P	D.P. ³	P	P	P	P	P
Naphthalin.....	P	P	P	P	P	P	P	P	P	P	P	L	P	P	P	P	L	P	P	P
Phenacetin.....	P	P	P	P	P	L	P	P	P	P	P	L	P	P	P	P ¹	P	P	P	P
Phenol. ₄	L	L	L	L	L	L	L	L	L	L	L	P	L	L	L	P	L	P	L	L
Pyrogallol.....	P	P.M. ³	P	L	P	P	L	L	P	P	P	L	P	P	P	P	P	P	P	L
Resin. ₅	P	P	P	P	P	P	P	L	P	P	P	L	P	P	P	P	P.M.	P	P.M.	P.M.
Resorcin.....	D.P. ²	P.M. ²	P	L	P	P	L	L	D.P. ³	P	P	L	P	P	P	P	P	P	P	L
Salicylic Acid.....	P	P ¹	P	P	P	P	L	P	P	P	P ¹	P	P	P	P	P	P	P	P	L
Salol.....	P	D.P. ³	P	L	L	L	L	P	P	L	P	L	P	P.M.	P	P	P	P	L	L
Sodium Salicylate.....	P	P ¹	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Thymol.....	L	L	P	L	L	L	L	L	P	P	P	L	P	P.M.	P	P	L	P	P	L
Urethane.....	P	L	L	L	P	L	L	L	P	P	P	L	L	P.M.	L	L	L	P	L	P