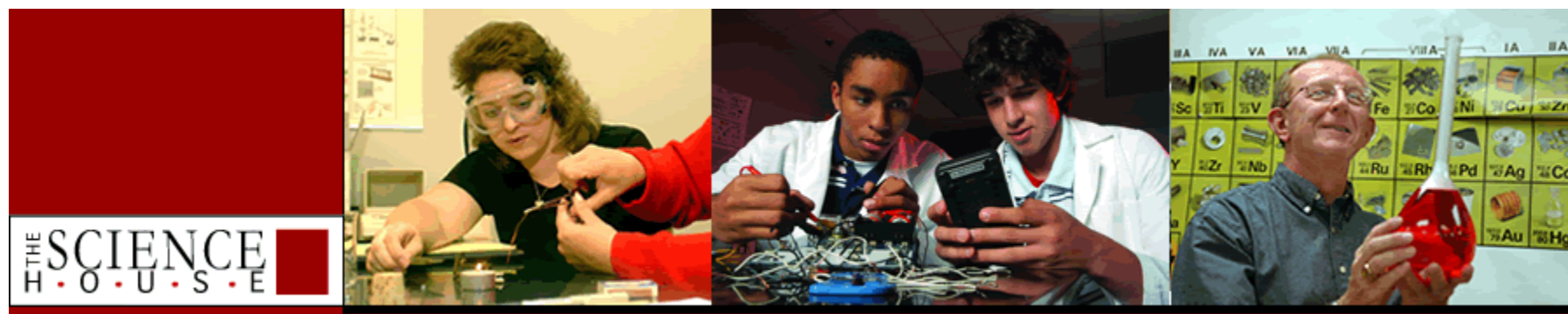




[What's New](#)

[About The Science House](#)

[Professional Development](#)

[Inquiry Activities](#)

[Student Programs](#)

[Resources](#)

[K12 Outreach Directory](#)

[Satellite Offices](#)

[Calendar](#)

Countertop Chemistry Appendix D

Commercial equivalents for chemicals

COMPOUND	FORMULA	COMMERCIAL EQUIVALENT	SOURCE
acetic acid	CH_3COOH	vinegar (5%)	grocery store
acetone	CH_3COCH_3	acetone	hardware store
acetylsalicylic acid	$\text{C}_9\text{H}_8\text{O}_4$	aspirin	drug store
aluminum	Al	foil or wire	grocery or hardware store
aluminum potassium sulfate	$\text{KAl}(\text{SO}_4)_2$	alum	drug store
aluminum sulfate	$\text{Al}_2(\text{SO}_4)_3$	flocculating powder	pool supply store
ammonium carbonate	$(\text{NH}_4)_2\text{CO}_3$	smelling salt	drug store
ammonium chloride	NH_4Cl	sal ammoniac	drug store
ammonium hydroxide	$\text{NH}_4(\text{aq})$	ammonia cleaner (10%)	grocery store
ammonium nitrate	NH_4NO_3	nitrate of ammonia	garden supply store
amylose	$(\text{C}_6\text{H}_{10}\text{O}_5)_n$	cornstarch	grocery store
ascorbic acid	$\text{C}_6\text{H}_8\text{O}_6$	vitamin C	drug store

boric acid	H_3BO_3	boric acid eyewash	drug store
		solid roach killer	hardware store
butane	C_4H_{10}	disposable lighter	grocery store
		fluid	
caffeine	$\text{C}_8\text{H}_{10}\text{N}_4\text{O}_2$	No-Doz ^a tablets	drug store
calcium carbonate	CaCO_3	white chalk, calcium supplement	drug store
calcium chloride	CaCl_2	"De-Ice" for sidewalks	grocery store
calcium hydroxide	$\text{Ca}(\text{OH})_2$	slaked lime, some antacids	hardware store
			pool supply store
calcium oxide	CaO	Quicklime ^a	hardware store
calcium phosphate, monobasic	$\text{Ca}(\text{H}_2\text{PO}_4)_2$	superphosphate	garden supply store
calcium sulfate	CaSO_4	plaster of paris	hobby shop
		gypsum	building supply store
COMPOUND	FORMULA	COMMERCIAL EQUIVALENT	SOURCE
carbon	C	charcoal, graphite	hardware store
carbon dioxide-solid	CO_2	dry Ice	dairies, grocery store
carbonic acid	H_2CO_3	soda water	grocery store
citric acid	$\text{C}_6\text{H}_8\text{O}_7$	sour salt	grocery store
copper	Cu	sheet, pipe or wire	hardware store
copper sulfate, pentahydrate	$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$	Bluestone ^a algacide	hardware or lawn & garden center
		Root Eater ^a	

DMSO	$(\text{CH}_3)_2\text{SO}$	solvent	drug stores
95% ethanol	$\text{C}_2\text{H}_5\text{OH}$	Everclear ^a	liquor store
ethanol/ethyl alcohol	$\text{CH}_3\text{CH}_2\text{OH}$	denatured alcohol	hardware or paint shop
ethylene glycol	$\text{CH}_2\text{OHCH}_2\text{OH}$	antifreeze	auto supply store
fructose	$\text{C}_6\text{H}_{12}\text{O}_6$	fruit sugar	grocery store
glucose	$\text{C}_6\text{H}_{12}\text{O}_6$	dextrose	drug store
glycerol	$\text{C}_3\text{H}_8\text{O}_3$	glycerin	drug store
helium	He	helium	party shops
hydrochloric acid	HCl (aq)	muriatic acid masonry cleaner	hardware store or lawn & garden store
hydrogen peroxide	H_2O_2	3% antiseptic peroxide Clairoxide (12%)	drug stores beauty supply store
indicators		beet juice, red cabbage juice, cherry juice	grocery store
iodine	I_2	iodine	drugstore
iron	Fe	uncoated nails, filings steel wool	hardware store
iron (III) chloride	FeCl_3	none	drug store
lactic acid	$\text{C}_3\text{H}_6\text{O}_3$	milk acid	grocery store
lead	Pb	fishing line sinker	sporting supply store
magnesium hydroxide	$\text{Mg}(\text{OH})_2$	milk of magnesia	drug store
2-propanol	$\text{CH}_3\text{CH}(\text{OH})\text{CH}_3$	rubbing alcohol	drug store
COMPOUND	FORMULA	COMMERCIAL EQUIVALENT	SOURCE

magnesium sulfate, heptahydrate	$\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$	Epsom salts	drug store
methanol	CH_3OH	methyl alcohol, duplicator fluid, gasoline dryer	paint store office supply store auto supply store
methylene blue	$\text{C}_{16}\text{H}_{18}\text{CN}_3\text{S}$	methidote antiseptic biological stain	veterinarian tropical fish store
naphthalene	C_{10}H_8	moth balls	hardware store
nujol		mineral oil, baby oil	drug store
oil	Hydrocarbon (formula varies)	vegetable oil	grocery store
oxalic acid	$\text{C}_2\text{H}_2\text{O}_4$	rust remover radiator cleaner	drug store hardware store
para-dichlorobenzene	$\text{C}_6\text{H}_4\text{Cl}_2$	moth flakes	hardware store
paraffin		paraffin wax, candles	grocery store
phenol red	$\text{C}_{19}\text{H}_{19}\text{SO}_5$	swimming pool indicator	swimming pool supply
phosphoric acid	H_3PO_4	pH Down (30% solution)	tropical fish store
potassium aluminum sulfate	$\text{KAl}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$	potassium alum	photo supply store
potassium bitartrate, potassium hydrogen tartrate	$\text{KHC}_4\text{H}_4\text{O}_6$	cream of tartar	grocery store
potassium bromide	KBr	potassium bromide	photo store
potassium carbonate	K_2CO_3	potash	agricultural supply store

potassium chloride	KCl	lite salt	grocery store
potassium dichromate	$K_2Cr_2O_7$	none	photo supply store
potassium hydroxide	KOH	caustic potash	hardware or ceramic shop
potassium nitrate	KNO_3	saltpeter	drug store
COMPOUND	FORMULA	COMMERCIAL EQUIVALENT	SOURCE
potassium permanganate	$KMnO_4$	"Clearwater" (53% soln.)	tropical fish store
sodium bicarbonate, sodium hydrogen carbonate	$NaHCO_3$	baking soda	grocery store
sodium carbonate	Na_2CO_3	washing soda	grocery store
sodium chloride	NaCl	plain table salt -uniodized	grocery store
sodium hydroxide	NaOH	drain opener (LYE)	hardware store or farm supply store
sodium hypochlorite	NaClO	bleach (5% Sol'n)	grocery store
sodium nitrate	$NaNO_3$	Chile saltpeter	garden supply store
sodium phosphate	Na_3PO_4	trisodium phosphate (TSP)	paint or garden shop
sodium silicate	Na_2SiO_3	water glass	hardware store
sodium tetraborate decahydrate	$Na_2B_4O_7 \cdot 10 H_2O$	borax	grocery store
sodium thiosulfate	$Na_2S_2O_3$	hypo	photo store
stearic acid	$C_{17}H_{35}CO_2H$	candle hardener	hobby shop
sucrose	$C_{12}H_{22}O_{11}$	table sugar	grocery store
sulfur	S	sulfur	lawn & garden shops
tin or copper	Sn, Cu	metal sheets	hardware store

			builders supply store
vermiculite		gardening soil	lawn & garden center
zinc	Zn	galvanized nails	hardware store

[Return to Countertop Chemistry](#)

NC STATE UNIVERSITY

[Contact Us](#) [Site Map](#) [Search](#) [Home](#) Copyright 2006 The Science House