

Chart of Saponification Values for Making Soap

Saponification Values for Making Soap with Lye (Sodium Hydroxide) or with Caustic Potash (Potassium Hydroxide)

Fat or Oil	Lye (Sodium Hydroxide), NaOH	Caustic Potash (Potassium Hydroxide), KOH
Almond Oil ♥	0.1367	0.1925
Aloe Vera Butter ♥	0.1788	0.2518
Aloe Vera Oil ♥	0.1421	0.2001
Apricot Kernel Oil ♥	0.1378	0.1941
Avocado Butter ♥	0.1339	0.1886
Avocado Oil ♥	0.1337	0.1883
Babassu Nut Oil ♥	0.1749	0.2463
Beeswax Animal!	0.0689	0.0970
Borage Oil ♥	0.1339	0.1886
Candelilla Wax ♥	0.0322	0.0454
Canola Oil ♥	0.1328	0.1870
Canola Oil, High Oleic Acid ♥	0.1330	0.1873
Castor Bean Oil ♥	0.1286	0.1811
Cherry Kernel Oil ♥	0.1389	0.1956
Chicken Fat Animal!	0.1356	0.1910
Cocoa Butter ♥	0.1378	0.1941
Coconut Oil, Refined 76° ♥	0.1910	0.2690
Coconut Oil, Hydrogenated 92° ♥	0.1910	0.2690
Coconut Oil, Fractionated/Saturated ♥	0.2321	0.3269
Copha® Vegetable Shortening ♥	0.1910	0.2690
Corn Oil ♥	0.1368	0.1927
Cottonseed Oil ♥	0.1387	0.1954
Crisco® Vegetable Shortening ♥	0.1369	0.1928

♥ Indicates a fat not from an animal source.

Animal! Indicates a fat from an animal source.

These saponification values indicate the amount of lye (sodium hydroxide) or the amount of caustic potash (potassium hydroxide) needed to completely saponify the listed fat using consistent units of weight.

Fat or Oil	Lye (Sodium Hydroxide), NaOH	Caustic Potash (Potassium Hydroxide), KOH
Emu Oil Animal!	0.1377	0.1939
Evening Primrose Oil ♥	0.1362	0.1918
Flaxseed Oil ♥	0.1358	0.1913
Goat Fat Animal!	0.1382	0.1946
Goose Fat Animal!	0.1349	0.1900
Grapeseed Oil ♥	0.1321	0.1861
Hazelnut Oil ♥	0.1369	0.1928
Hempseed Oil ♥	0.1359	0.1914
Jojoba Seed Oil ♥	0.0695	0.0979
Jojoba Seed Liquid Wax ♥	0.0695	0.0979
Karite Butter ♥	0.1296	0.1825
Kremelta® Vegetable Shortening ♥	0.1910	0.2690
Kukui Nut Oil ♥	0.1351	0.1903
Lanolin Animal!	0.0748	0.1054
Lard Animal!	0.1399	0.1970
Linseed Oil ♥	0.1358	0.1913
Macadamia Nut Oil ♥	0.1391	0.1959
Milk Fat Animal!	0.1599	0.2252
Mink Oil Animal!	0.1403	0.1976
Monoï de Tahiti Oil ♥	0.1796	0.2530
Neem Tree Oil ♥	0.1372	0.1932
Olive Oil ♥	0.1353	0.1906
Ostrich Oil Animal!	0.1385	0.1951
Palm Kernel Oil ♥	0.1777	0.2503
Palm Oil ♥	0.1420	0.2000
Peach Kernel Oil ♥	0.1361	0.1917
Peanut Oil ♥	0.1367	0.1925
Pumpkin Seed Oil ♥	0.1389	0.1956
Rapeseed Oil ♥	0.1328	0.1870
Rice Bran Oil ♥	0.1284	0.1808

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Animal! Indicates a fat from an animal source.

These saponification values indicate the amount of lye (sodium hydroxide) or the amount of caustic potash (potassium hydroxide) needed to completely saponify the listed fat using consistent units of weight.

Fat or Oil	Lye (Sodium Hydroxide), NaOH	Caustic Potash (Potassium Hydroxide), KOH
Safflower Oil, High Linoleic Acid ♥	0.1374	0.1935
Safflower Oil, High Oleic Acid ♥	0.1369	0.1928
Sesame Seed Oil ♥	0.1336	0.1882
Shea Butter ♥	0.1296	0.1825
Soybean Oil ♥	0.1359	0.1914
Soybean Oil, 27.5% Hydrogenated ♥	0.1361	0.1917
Stearic Acid, Animal-Source Animal!	0.1413	0.1990
Stearic Acid, Vegetable-Source ♥	0.1411	0.1987
Sunflower Seed Oil ♥	0.1358	0.1913
Sunflower Seed Oil, High Oleic Acid ♥	0.1351	0.1903
Tallow, Beef Animal!	0.1419	0.1999
Tallow, Deer Animal!	0.1382	0.1946
Tallow, Sheep Animal!	0.1384	0.1949
Tamanu Seed Oil ♥	0.1437	0.2024
Tiaré Flower Oil ♥	0.1796	0.2530
Walnut Oil ♥	0.1349	0.1900
Wheat Germ Oil ♥		

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These saponification values indicate the amount of lye (sodium hydroxide) or the amount of caustic potash (potassium hydroxide) needed to completely saponify the listed fat using consistent units of weight.