

SOME IMPORTANT ALLOYS, THEIR COMPOSITIONS & USES

1. Alnico	63% Fe, 12%Al, 20%Ni, 5%Co (For making permanent magnets)
2. Alpan	Al + Si
3. Amalgam	Hg + any other metal
4. Bell metal	80%Cu, 20%Sn (bells, utensils, idols, coins etc.)
5. Bearing metal	82%Sn, 14%Sb, 4%Cu
6. Birmabright	5%Mg, 95%Al
7. Brass	Cu + Zn (Household utensils)
8. Britannia metal	93%Sn, 5%Sb, 2%Cu
9. Bronze	75% to 90%Cu, 25% to 10%Sn (coins, idols, bells, utensils etc.)



10. Constantan	60%Cu, 40%Ni (Electrical apparatus)
11. Common solder	50%Pb, 50%Sn
12. Coinage alloy	75%Cu, 25%Ni (For making coins)
13. Delta metal	Cu + Zn + Fe (Ship's propellers)
14. Duralumin	94.4%Al, 4%Cu, Mg, Mn, Si (For making air ships, pressure cookers)
15. Dutch metal	80%Cu, 20%Zn (Golden yellow, cheap ornaments)
16. Fine solder	56%Sn, 33%Pb
17. German silver	60%Cu, 25%Zn, 15%Ni (Utencils)
18. Gun metal	86%Cu, 10%Sn, 4%Zn (For engineering works)
19. Invar	63%Fe, 36%Ni, 1%C (Watch pendulum)
20. Manganin	84%Cu, 12%Mn, 4%Ni
21. Mangelium	85% to 99%Al, 1% to 15%Mg (Aeroplane's frame)

22. Monel metal	30%Cu, 70%Ni (For making alkali resistant containers)
23. Munz metal	60%Cu, 40%Zn (coins, tubes, castings)
24. Newtons' metal	Sn + Pb + Bi
25. Nicrome	Cr + Ni + Fe (Heater coil)
26. Pewter	75%Sn, 25%Pb (For metal soldering)
27. Phosphor bronze	85%Cu, 13%Sn, 2%P
28. Plumber's solder	70%Pb, 30%Sn
29. Rolled Gold	90%Cu, 10%Al (Cheap ornaments)
30. Rose's fusible metal	Bi + Pb + Sn (Automatic fuses, M.P. = 83°C)
31. Solder	Sn + Pb (For metal soldering)
32. Stainless steel	73%Fe, 1%C, 18%Cr, 8%Ni (For making automobile parts)
33. Stalloy	Fe + Si
34. Type metal	75%Pb, 20%Sb, 5%Sn (Compositor's Type)



35. Wood's metal	Bi + Pb + Sn + Cd (For automatic fuses M.P. = 60°C)
36. Y-alloy	Cu + Al
37. Amatol	80%NH ₄ NO ₃ + 20%T.N.T. (explosive)
38. Gun powder	75%KNO ₃ , 12%S, 13% Charcoal
39. Rectified spirit	95.6% ethyl alcohol, 4.4% Water
40. Vinegar	10% acetic acid solution

