

? Fe?0.6?1.2

? Mn?0.5?0.8

? Sb ??0.01

? Bi??0.003

???0.3(??)

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????????????????????????

???T1 T2 T3

????TU0 TU1 TU2

????TP1 TP2 TAg0.1

???H96 H90 H85 H80 H70 H68 H65 H63 H62 H59

????HNI65-5 HNI56-3

????HPb89-2 HPb66-0.5 HPb63-3 HPb63-0.1 HPb62-0.8 HPb62-3 HPb62-2 HPb61-1 HPb60-2 HPb5
9-3 HPb59-1

????HAI77-2 HSn70-1 H85A H70A H68A

????HSn90-1 HSn62-1 HSn60-1

????HAI67-2.5 HAI61-4-3-1 HAI60-1-1 HAI59-3-2 HAI66-6-3-2

????HMn62-3-3-7 HMn58-2 HMn57-3-1 HMn55-3-1

????HFe59-1-1 HFe58-1-1

????HSi80-3

????QSn1.5-0.2 QSn4-0.3 QSn4-3 QSn4-4-2.5 QSn4-4-4 QSn6.5-0.1 QSn6.5-0.4 QSn7-0.2 QSn8-0.3

????QAI5 QAI7 QAI9-2 QAI9-4 QAI10-3-1.5 QAI10-4-4 QAI11-6-6 QAI9-5-1-1 QAI10-5-5

????QBe2 QBe1.9 QBe1.9-0.1 QBe1.7 QBe0.6-2.5 QBe0.4-1.8 QBe0.3-1.5

????QSi3-1 QSi1-3 QSi3.5-3-1.5

????QMn1.5 QMn2 QMn5

????QZr0.2 QZr0.4

????QCr1 QCr0.5 QCr0.5-0.2-0.1 QCr0.6-0.4-0.05

????Qcd1

????QMg0.8

????QFe2.5

????QFe0.5

???B0.6 B5 B19 B25 B30

????BFe5-1.5-0.5 BFe10-1-1 BFe30-1-1

????BMn3-12 BMn40-1.5 BMn43-0.5

????BZn18-18 BZn18-26 BZn15-20 BZn15-21-1.8 BZn15-24-1.5

????BAI3-3 BAI6-1.5

??????ZHD68 ZHD62

???????ZHAID67-5-2-2 ZHAID63-6-3-3 ZHAID62-4-3-3 ZHAID67-2.5 ZHAID61-2-2-1

???????ZHMnD58-2-2 ZHMnD58-2 ZHMnD57-3-1

???????ZHPbD65-2 ZHPbD59-1 ZHPbD60-2

???????ZHSiD80-3 ZHSiD80-3-3

???????ZQSnD3-8-6-1 ZQSnD3-11-4 ZQSnD5-5-5 ZQSnD6-6-3 ZQSnD10-1 ZQSnD10-2 ZQSnD10-5

???????ZQPbD10-10 ZQPbD15-8 ZQPbD17-4-4 ZQPbD20-5 ZQPbD30

???????ZQAID9-2 ZQAID9-4-4-2 ZQAID10-2 ZQAID9-4 ZQAID10-3-2

???????ZQMnD12-8-3 ZQMnD12-8-3-2

?????CuSi16 CuMn28 CuMn22 CuNi15 CuFe10 CuFe5 CuSb50 CuBe4 CuP14 CuP12 CuP10 CuP8
CuMg20 CuMg10

????ZCuSn3Zn8Pb6Ni1 ZCuSn3Zn11Pb4 ZCuSn5Pb5Zn5 ZCuSn10Pb1 ZCuSn10Pb5 ZCuSn10Zn2

????ZCuPb15Sn8 ZCuPb17Sn4Zn4 ZCuPb20Sn5 ZCuPb30

????ZCuAl8Mn13Fe3 ZCuAl8Mn13Fe3Ni2 ZCuAl9Mn2 ZCuAl9Fe4Ni4Mn2 ZCuAl11Fe3 ZCuAl10Fe3
Mn2

???ZCuZn38 ????ZCuZn25Al6Fe3Mn3 ZCuZn26Al4Fe3Mn3 ZCuZn31Al2 ZCuZn35Al2Mn2Fe1

????ZCuZn38Mn2Pb2 ZCuZn40Mn2 ZCuZn40Mn3Fe1

????ZCuZn33Pb2 ZCuZn40Pb2

????ZCuZn16Si4 ??????ZCuSn3Zn8Pb6Ni1 ZCuSn3Zn11Pb4 ZCuSn5Pb5Zn5 ZCuSn10Pb1 ZCuSn1
0Pb5 ZCuSn10Zn2 ZCuPb10Sn10 ZCuPb15Sn8 ZCuPb17Sn4Zn4 ZCuPb20Sn5 ZCuPb30 ZCuAl8Mn
13Fe3 ZCuAl18Mn13Fe3Ni2 ZCuAl9Mn2 ZCuAl9FeNi4Mn2 ZCuAl10Fe3 ZCuAl10Fe3Mn2 ZCuZn38 Z
CuZn25Al6Fe3Mn3 ZCuZn26Al4Fe3Mn3 ZCuZn31Al2 ZCuZn35Al2Mn2Fe1 ZCuZn38Mn2Pb2 ZCuZn
40Mn2 ZCuZn40Mn3Fe1 ZCuZn33Pb2 ZCuZn40Pb2 ZCuZn16Si4