

Standard of Environmental Chemicals of Punch Industry Co.,Ltd

6/20/06

	Substance	RoHS Directive	Threshold of JIG ※1 (Duty of Disclosure of Concentration Level)	Punch Industry's Threshold ※2
1	Cadmium and Cadmium Compounds	Contained Concentration Level under 100ppm	Intentional Addition or 75ppm	Prohibition of Intentional Use ・Resin/Rubber/Paint/Ink/Pigment/Dye Under 5ppm ・Alloys containing Zinc (Zinc die-casting, brass and etc.) Under 75ppm ・Metal Material Under 20ppm ・A total amount of Cd, Pb, Hg, Cr+6 in packing materials Under 100ppm
2	Hexavalent Chromium Compounds	Contained Concentration Level under 1000ppm	Intentional Addition or 1000ppm	Prohibition of Intentional Use ・Chromating Materials Under 100ppm (Chromating using hexavalent chromium compounds is prohibited.) ・A total amount of Cd, Pb, Hg, Cr+6 in packing materials Under 100ppm
3	Lead and Lead Compounds	Contained Concentration Level under 1000ppm <Exclusion> ・Steel Under 0.35Wt% ・Aluminum Alloy Under 0.40Wt% ・Copper Alloy Under 4.00Wt%	Intentional Addition or 1000ppm (Only Chloroethene Cable 300ppm)	Prohibition of Intentional Use ・Resin/Rubber/Paint/Ink/Pigment/Dye Under 100ppm ・Metal Material Under 500ppm ・A total amount of Cd, Pb, Hg, Cr+6 in packing materials Under 100ppm <Exclusion> ・Steel Under 0.35Wt% ・Aluminum Alloy Under 0.40Wt% ・Copper Alloy Under 4.00Wt%
4	A Mercury and Mercury Compounds	Contained Concentration Level under 1000ppm	Intentional Addition or 1000ppm	Prohibition of Intentional Use ・A total amount of Cd, Pb, Hg, Cr+6 in packing materials Under 100ppm
5	Tributyl Tin Oxide (TBTO)	—	Intentional Addition	Banned Substance
6	Tributyl Tins(TBT) & Triphenyl Tins(TPT)	—	Intentional Addition	Banned Substance
7	Polybrominated Biphenyls(PBBs)	Contained Concentration Level under 1000ppm	Intentional Addition or 1000ppm	Prohibition of Intentional Use (Contained Concentration Level under 1000ppm)
8	Polybrominated Diphenyl ethers(PBDEs)	Contained Concentration Level under 1000ppm	Intentional Addition or 1000ppm	Prohibition of Intentional Use (Contained Concentration Level under 1000ppm)
9	Polychlorinated Biphenyls(PCBs)	—	Intentional Addition	Banned Substance
10	Polychlorinated Naphthalenes(CI≥3)	—	Intentional Addition	Banned Substance
11	Short Chain Chlorinated Paraffins	—	Intentional Addition	Banned Substance
12	Asbestos	—	Intentional Addition	Banned Substance
13	Azo Colorants	—	Intentional Addition	Banned Substance
14	Ozone Depleting Substances	—	Class I : Intentional Addition Class II : HCFCs : 1000ppm	Banned Substance
15	Radioactive Substances	—	Intentional Addition	Banned Substance
16	Antimony and Antimony Compounds	—	1000ppm	Substance under control (Report if it's above 1000ppm)
17	Arsenic and Arsenic Compounds	—	1000ppm	Substance under control (Report if it's above 1000ppm)
18	Beryllium and Beryllium Compounds	—	1000ppm	Substance under control (Report if it's above 1000ppm)
19	Bismuth and Bismuth Compounds	—	1000ppm	Substance under control (Report if it's above 1000ppm)
20	Nickel and Nickel Compounds	—	1000ppm	Substance under control (Report if it's above 1000ppm) ※7
21	Selenium and Selenium Compounds	—	1000ppm	Substance under control (Report if it's above 1000ppm)
22	Magnesium	—	—	Substance under control (Report if it's above 1000ppm)
23	Brominated Flame Retardants (Except for PBBs and PBDEs)	—	1000ppm	Substance under control (Report if it's above 1000ppm)
24	Vinyl Chloride Polymer(PVC)	—	1000ppm	Banned Substance
25	Phthalates	—	1000ppm	Substance under control (Report if it's above 1000ppm)
26	Copper and Copper Compounds	—	—	Substance under control (Report if it's above 1000ppm)
27	Gold and Gold Compounds	—	—	Report for Intentional Use
28	Palladium and Palladium Compounds	—	—	Report for Intentional Use
29	Silver and Silver Compounds	—	—	Report for Intentional Use

※1 Definition of Threshold of JIG

・The concentration level that their information has to be disclosed when the any values of chemicals and substances contained in a product or a part correspond with or exceed the limitations.

※2 Definition of Punch Industry's Threshold

・The concentration level of chemicals and substances contained in a homogeneous material of a product or a part.

・A homogeneous material is a substance which is inseparable into two by physical action, such as taking off screw, cutoff or etc. For example, plating case of chromating steel plate is equal to the portion of the homogeneous material.

※3 Carbon chain length : Short chain chlorinated paraffins(Carbon-10~13)

※4 Azo dyes and pigment forming certain amines. The subjected applications are limited to parts that may come into direct contact with human skin for a long time.

※5 Substances listed in Montreal Protocol

※6 Only when there's possibility that Nickel touches human skin for a long time.

※7 Nickel compounds except for alloyed metal(for example : stainless steel)

※8 Only applies to the following 5 compounds which have been subjected to EU risk assessment.

Dibutylphthalate/ Di(2-ethylhexyl)phthalate/ Diisononyl phthalate/ 1,2-Benzenedicarboxylic acid diisodecyl ester/ Butyl benzyl phthalate

