

Common Product Environment Procurement Specification		Spec.No	KS002-04-1																																																																												
		Compiled	December 16, 2011																																																																												
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		Hitachi Metals, Ltd. Ibaraki Works Advanced Components & Materials Division Quality Assurance Dept.																																																																													
Name	Content chemical substance common procurement specification (Applies to packaging materials)	Approved	Reviewed	Prepared																																																																											
		K. Nishino August 18, 2021	K. Yokoyama August 18, 2021	K. Yokoyama August 18, 2021																																																																											
<p>1. Application This specification applies to the products that are quoted this specification by such as "Order form", "Individual procurement specifications", "Drawings" and etc. This specification is aimed at packaging materials that used for Advanced Components & Materials Division Ibaraki Works' products. The requirements are partly different from these of "Advanced Components & Materials Division Ibaraki Works' Green Procurement Standards (HKS01 Version 4.1)".</p> <p>2. Requirements 2-1 Prohibited Substances The following chemical substances must not be used intentionally, and the contained concentration as an impurity must be below the maximum allowable value if it is shown.</p> <p>(1) "Law concerning the examination and regulation of manufacture etc., of chemical substances (Japan)," (Class 1 specified chemical substances) (2) Prohibition Substances of Manufacturing, etc. of "Industrial Safety and Health Law (Japan)" (3) A specific toxic substance of "Poisonous and Deleterious Substances Control Act (Japan)" (4) The chemical substances shown in Table 1.</p> <p style="text-align: center;">Table 1. Prohibited Substances Group List (1/2)</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Prohibited chemical substances</th> <th>Maximum allowable value *1,*2</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Cadmium and its compounds</td> <td rowspan="4">A total of 100 ppm *3</td> </tr> <tr> <td>2</td> <td>Hexavalent chromium compounds</td> </tr> <tr> <td>3</td> <td>Lead and its compounds</td> </tr> <tr> <td>4</td> <td>Mercury and its compounds</td> </tr> <tr> <td>5</td> <td>Polybromobiphenyl (PBB group)</td> <td>1,000ppm</td> </tr> <tr> <td>6</td> <td>Polybromodiphenyl ether group (PBDE group) (Incl. decaBDE)</td> <td>Intentional use prohibited *4 and 1,000ppm</td> </tr> <tr> <td>7</td> <td>Tri-substituted organostannic compounds (Incl. 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Tributyl tin oxide (TBTO) (CAS No. 56-35-9), Tributyltin (TBT), Triphenyltin group (TPT))	Intentional use prohibited *4, and per material 1,000ppm *3	8	Polychlorinated biphenyl group (PCB group) and specified alternative *5	Intentional use prohibited *4	9	Polychlorinated terphenyls (PCTs group)	Intentional use prohibited *4	10	Polychlorinated naphthalene (with 1 or more chlorines)	Intentional use prohibited *4	11	Short-chain paraffin chloride (carbon chain length between 10 and 13)	Intentional use prohibited *4	12	Asbestos group	Intentional use prohibited *4 and 1,000ppm	13	Specified azo dyes/pigments *6 *7	30 ppm (as Specified amines)	14	Ozone layer depleting substances	Intentional use prohibited *4	15	Radioactive materials	Intentional use prohibited *4	16	Formaldehyde (CAS No. 50-00-0)	Intentional use prohibited *4	17	Perfluorooctane sulfonate (PFOS) and its compounds	Intentional use prohibited *4	18	Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl) (CAS No. 3846-71-7)	Intentional use prohibited *4	19	Dimethyl fumarate (CAS No. 624-49-7)	Intentional use prohibited *4	20	Dibutyltin (DBT) compounds	Per material 1,000ppm *3	21	Cobalt dichloride (CAS No. 7646-79-9)	Intentional use prohibited *4	22	Hexabromocyclododecane (HBCDD) *7	Intentional use prohibited *4	23	Perfluorooctanoic acid (PFOA) and its salts and related substances *7	Intentional use prohibited, and PFOA: 0.025ppm Total of PFOA's: 1ppm	24	Hexachlorobenzene (CAS No. 118-74-1)	Intentional use prohibited *4	25	Polyvinyl chlorides (PVCs) and its mixture, its copolymer	Intentional use prohibited for plastic material *4 *8
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Table 1. Prohibited Substances Group List (2/2)

No.	Prohibited chemical substances	Maximum allowable value *1,*2
26	Bis (2-ethylhexyl) phthalate (DEHP(DOP)) (CAS No. 117-81-7)	1000ppm as the sum of the phthalate in plasticized material
27	Benzyl butyl phthalate (BBP) (CAS No. 85-68-7)	
28	Dibutyl phthalate (DBP)(CAS No. 84-74-2)	
29	Diisobutyl phthalate (DIBP) (CAS No. 84-69-5)	Intentional use prohibited
30	Phenol, isopropylated phosphate (3:1) (PIP (3:1)) (CAS No.68937-41-7)	
31	Pentachlorothiophenol (PCTP) (CAS No.133-49-3)	Intentional use prohibited

*1 The denominator of the concentration value is the mass of the homogeneous material that cannot be disassembled mechanically into different materials .

*2 With no volatile component

*3 The rated value as mass of metallic elements

*4 Intentional use means deliberate uses of such banned chemical substances during the formulation of the product or its parts in case continuous presence of such substances is desired to provide a specific characteristic, appearance, property, attribute or quality.

*5 The specified alternatives for the PCB group are listed below.

1) Mono methyl tetrachloro diphenylmethane (CAS No.76253-60-6)

2) Mono methyl dichloro diphenylmethane (CAS No.81161-70-8)

3) Mono methyl dibromo diphenylmethane (DBBT) (CAS No.99688-47-8)

*6 Azo-dyes/pigments forming specified amines.

*7 Refer to HKS_Annex.

*8 Customer requirements for plastic materials of packing

2-2 Controlled Chemical Substances

Refer to the latest edition of Advanced Components & Materials Division Ibaraki Works' Green Procurement Standards (HKS01 Version 4.1)

3. Submission of Information on Chemical Substances Included in Delivered Products ("Warranty of Non-inclusion Concerning Chemical Substances in Delivered Products," "Product Composition Data," "Analysis Report," and "Safety Data Sheet (SDS)")

Refer to the latest edition of Advanced Components & Materials Division Ibaraki Works' Green Procurement Standards (HKS01 Version 4.1)