FDK CONFIDENTIAL No. : FDK 508-01

FOR SUPPLIERS

MANAGEMENT STANDARD FOR CONTAINED CHEMICAL SUBSTANCES

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Revised on February 16, 2015(Rev.5)

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FDK CORPORATION

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1. PURPOSE

This standard define the Management standards for Contained Chemical Substances of FDK Group(hereinafter referred to as "FDK") and aim for the thorough realization of the management of contained chemical substances in FDK.

2. SCOPE

The standard is applied to the chemical substances contained in FDK's procured parts, products and the packing materials.

3. DEFINITION OF TERMS

(1) Procured Parts (Deliverables on FDK Group Specified Chemical Substance List)

All the parts (including raw materials), sub-materials and production subsidiary materials constituting comprise FDK's products.

(2) Products

- 1. Products designed, produced and sold by FDK.
- 2. Products designed and produced by a third party under commission from FDK and are sold with FDK's trademark.
- 3. Products designed and produced by FDK under commission from a third party.

(3) Packaging Materials

Materials used to wrap or pack FDK's procured parts or products

Examples: Cardboard boxes, inks, paints, wrapping bands, labels, and adhesives.

(4) Sub-materials

Materials used to satisfy the functions of products. Examples: Adhesive tapes, solders, adhesives, and paints (including coatings and platings).

(5) Production Subsidiary Materials

Materials, not directly affecting the functions of products, but used in the production process of products and adhered to products.

Examples: Inks used in inspection (if adhered to products), labels, and residues of wax/tapes used for temporary fixation.

(6) Contained Chemical Substances

Chemical substances contained in FDK's procured parts, products and packing materials.

(7) Contain

This term indicates that chemical substances (including impurities) are, whether intentionally or not, added, filled, mixed or adhered to FDK's procured parts, products and

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packing materials.

(This term also indicates that chemical substances are unintentionally mixed or adhered to products during the production process.)

(8) Intentional addition

Deliberate use in the formulation of Deliverables where its presence is desired to provide a specific characteristic, appearance or quality regardless of concentration of the chemical substance.

(9) Material

Homogeneous material which cannot be decomposed further more or composite material which can be regarded as homogeneous in order to fulfill its specific function(s), for which it is set or formed at particular position.

(10) Impurities

This term indicates substances which are contained in natural materials and cannot be technically removed completely by refinery processes as industry materials, or substances which are generated in synthetic reaction and cannot be technically removed completely.

(11)Preparation

A mixture or solution composed of two or more substance. (e.g. adhesives, plating solution, coating materials)

(12)Chemical Product

Chemical substance and/or mixture.

(13)Chemical Substance

A chemical element or compound that either exists in nature or is obtained through a manufacturing process.

(14)Mixture

A mixture intentionally comprising two or more chemical substances.

(15)Article

An item of specific shape, appearance or design created during manufacture which substantially determines functions in final use rather than functions provided by its chemical composition.

(16) Acceptable Limits

Maximum concentration never be exceeded in ppm of a target contained chemical substance in a material which cannot be separated into different materials mechanically (a homogeneous material).

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(17)Content Rate

Concentration of a chemical substance, used unit of [ppm] (weight ratio, 1 ppm is one-millionth), or used of [wt%] (weight ratio, 1 wt% is one-hundredth).

(How to calculate of the content rate in each specified substance are referred the annotation of each table.)

(18) CAS No.

A registration number for a chemical substance used in the chemical substances registration system in the CAS (Chemical Abstract Service) which was established by the American Chemical Society. It is also called as a CAS number.

4. MANAGEMENT STANDARD FOR CONTAINED CHEMICAL SUBSTANCES

Contained chemical substances shall be controlled according to the following classification for contained chemical substances. Individual chemical substances and those standards including each classification are set down in "FDK Group Specified Chemical Substances List".

URL: http://www.fdk.co.jp/kankyou/green_proc/proc_list.html

(1) Banned Substance:

Substances which must not be contained in a Target Item at any time.

② Reportable Substance:

Reportable Substance(s) shall be taken hold on the presence or absence in Deliverables, and if Deliverables meet "Condition of Deliverables to be reportable" defined in the "FDK Group Specified Chemical Substances List", its total mass, purpose of use, and application area, etc., shall be reported to FDK.

(3) Control Substances:

In the case that Deliverables meet "Condition of Deliverables to be controlled" defined in the "FDK Group Specified Chemical Substance List", with respect to "Control Substance", its total mass, purpose of use, and application area, etc., shall be managed and recorded.

- ④ Prohibited Substance in manufacturing Process Substance shall be prohibited in manufacturing process.
- ⑤ Prohibitions about Purchased battery and Battery Material Prohibitions which shall be preferentially applied to Purchased battery and Battery Material.

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AMENDMENT HISTORY

Rev.	Date	Description of change
1	April 19, 2005	Establishment
2	July 9, 2007	 Annex1, Management Standard for Contained Chemical Substances, is modified as follows: In the Conditionally Banned Substances table, Acceptable Limit in Except for the following in the Cadmium and its compounds is modified from "< 75ppm" to "<75(100)ppm". The following note is also added: "*5: "<100ppm" is applied after relevant Danish laws and regulations are revised". In the conditionally banned Substances table, Acceptable Limit in Battery and battery pack in the Cadmium and its compounds is modified from "<250ppm of total weight" to "<20ppm of total weight". In the conditionally Banned Substances table, "<0.4% of total weight" in Acceptable Limit in Battery and battery pack in the Lead and its compounds is deleted. The note *4 to the Conditionally Banned Substances table is modified from "98/101/EC(91/157/EEC, 93/86/EEC" to "2006/66/EC". The same is applied to Annex4. "Azo compounds(Azo compound forming specific amine)" in Substance group of Annex2 and Annex3 and "Azo compounds(Azo-compound which forms specific amine)" in Substance of Annex4 are modified to "Azo compounds (Amines specified by EU directives, Chemical Examination Law(Japan), etc.)". In related Laws and Regulations of Contained Chemical Substances of Annex4, Relating the main regulations system etc. of PCBs, PCTs is modified from "2002/95/EC(EU/RoHS)" to "76/769/EEC".

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Rev	Date	Description of change	
3	May 8, 2008	 In Annex1, Management Standards for Contained Contain	"CAS lphenol" is 'PFOS
		Purpose	Acceptable Limit
		Except for the following	<1000ppm* ³
		• Substance, Preparations(grease, oil, etc.)	<50ppm
		• Surface finishing (such as coating)	$<1 \mu g/m^2$
		*6: The applications exempted from the EC Direct are not covered" is added.	ive 2006/122/EC
		2) In related Laws and Regulations of Contained Chem	ical Substances
		of Annex4, "PFOS 2006/122/EC" is added to 22 other opposition substances.	conditional
4	July 12, 2010	 Change in [ANNEX1] (1)143-50-0 chlordecones are added to the Uncond Substance. (2)Yellow phosphorus CAS No.7723-14-0 of the UBanned Substance is changed to 12185-10-3. Change in [Annex3] (1)The difference with JIG101Ed 3.0 is added to the CONTAINED CHEMICAL SUBSTANCES. (2)The list of the RoHS 6 substance on the LIST OF CHEMICAL SUBSTANCES is same with JIG101 (3)143-50-0 chlordecones are added to the Uncondition Substance of the LIST OF CONTAINED CHEMICAL SUBSTANCES. (4)The difference with the REACH SVHC material in LIST OF CONTAINED CHEMICAL SUBSTANCES watching material. (5)JGPSSI Substance No. is deleted. 	LIST OF CONTAINED Ed3.0. onally Banned CAL s added to the

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Rev.	Date	Description of change
5	February 16, 2015	 3. Added definition of terms "Intentional addition, Material, Preparation, Chemical product, Chemical substance, mixture, and Article. The term of "ppm" was changed to "Content Rate" and contents of its definition were modified as well. 4. Management Standard for Contained Chemical Substances was changed to "Management Classification", the group and subject chemical substances were modified as well. 3. Definition of terms for Management Classification of Contained Chemical Substances is deleted accordingly. [ANNEX1][ANNEX2][ANNEX3] are deleted accordingly. 5. Related Laws and Regulation are deleted [ANNEX4] is deleted accordingly.
6	August 7, 2017	1) Title of item 4 was changed to MANAGEMENT STANDARD FOR CONTAINED CHEMICAL SUBSTANCES, and ⑤ Prohibitions about Purchased battery and Battery Material was added into classification for contained chemical substances in item 4.