

**The Shin-Etsu Polymer Group Control Standards of Chemical Substances Contained in Products**  
Version 4.0

Established on September 1, 2008  
Revised on April 1, 2019

For the Group's products and purchased materials, such as raw materials, components and packaging materials, the standards set out in Table 1 should be complied with for the following prohibited substances, controlled substances, and reporting substances. The threshold levels for substances subject to RoHS II, ELV, and the like, have been set on the basis of the strictest values in the domestic electric machinery and electronics industry (Table 5). However, exceptions to the application to individual chemical substances are in accordance with laws and regulations.

For products for customers in the construction material field, products for customers in the field of certain industrial products, and products with specifications arranged with customers, other criteria are provided separately and individually. Similarly, other criteria are provided separately and individually for purchased materials, such as raw materials, components and packaging materials related to these products.

The Group's divisions and plants may require suppliers to implement controls that differ from those stipulated in these Standards, depending on local laws or customer specifications. In this event, such specifications should be superseded.

Table 1: Criteria for prohibited, controlled, and reporting substances

	Prohibited Substances	Controlled Substances	Reporting Substances
Intentionally used	×	×	○ (Report only)
Contained as impurities	×	△	○ (Report only)

△: Allowed on condition that the threshold level is not exceeded, ×: Not allowed

Table 2: Prohibited Substances]

Class I specified chemical substances pursuant to the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	
Hazardous substances, etc. subject to prohibition of manufacturing, etc. pursuant to the Industrial Safety and Health Act	
Specified poisonous substances pursuant to the Poisonous and Deleterious Substances Control Act	
Substances subject to prohibition or restriction of use under the Toxic Substances Control Act (TSCA, Section 6) (US)	
Substances specified in Annex XVII of the REACH Regulations	Controlled according to the rules for prohibited or permitted usage
GADSL Reference List (Classification: Prohibited or Prohibited/Declarable)	

Table 3: Controlled Substances

Substances subject to the ELV Directive	Controlled in accordance with Table 5
Substances subject to the RoHS Directive	Controlled in accordance with Table 5
Substances of very high concern (SVHC) pursuant to the REACH Regulations	Controlled if their content exceeds 0.1% by weight
Substances listed in IEC 62474	Controlled in accordance with the reporting thresholds.

Table 4: Reporting substances

GADSL	Reference List (Classification: Declarable)
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[List of Substances Prescribed by These Control Standards]

The [Prohibited Substances], [Controlled Substances], and [Reporting Substances] under these Control Standards include the following substances prescribed by laws, regulations, industry standards, and the like.

If there is any revision to such laws, regulations, industry standards, and the like, these Control Standards shall include the revision in the updated Control Standards.

<ul style="list-style-type: none"> <li>●Occupational Safety and Health Act Harmful substances, etc. whose manufacturing, etc. is prohibited Occupational Safety and Health Act Execution Order Article 16:</li> </ul>
<ul style="list-style-type: none"> <li>●Poisonous and Deleterious Substances Control Act Specified Poisonous Substance(s) Poisonous and Deleterious Substances Control Act Appended Table 3</li> </ul>
Cabinet Order for the Designation of the Poisonous and Deleterious Substances Article 3

Controlled substances other than the above harmful substances, etc. whose manufacturing, etc. is prohibited under the Occupational Safety and Health Act and the specified poisonous substance(s) under the Poisonous and Deleterious Substances Control Act shall be controlled by using chemSHERPA.

<ul style="list-style-type: none"> <li>●Scheme for transmitting information about chemical substances contained in products: chemSHERPA See the list of substances to be controlled: Japanese, English, Chinese</li> </ul>
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Table 5: Control threshold for ten substances to be controlled in compliance with RoHS II , etc.

Substance / Category	Reportable Application(s)	Threshold Level
Cadmium / Cadmium Compounds	All except the subjects specified below	0.01% by weight (100 ppm) of cadmium in homogeneous material
Cadmium / Cadmium Compounds	Batteries <sup>1</sup>	0.001% by weight (10 ppm) of cadmium in a battery
Cadmium / Cadmium Compounds	Metal Plating <sup>2</sup>	0.0075% by weight (75 ppm) of cadmium in homogeneous material
Cadmium / Cadmium Compounds	Plastics <sup>2</sup>	0.0005% by weight (5 ppm) of cadmium in homogeneous material
Hexavalent chromium compounds	All except plastics	0.1 % by weight (1,000 ppm) of hexavalent chromium in homogeneous material
Hexavalent chromium compounds	Plastics	0.01% by weight (100 ppm) of hexavalent chromium in homogeneous material
Lead / Lead Compounds	All except the subjects specified below	0.1% by weight (1,000 ppm) of lead in homogeneous material
Lead / Lead Compounds	Consumer products mainly for children aged 12 and younger	0.01 % by weight (100 ppm) of lead in a product for children
Lead / Lead Compounds	Paints and surface coatings on toys and products for children	0.009% by weight (90 ppm) of lead in surface coating
Lead / Lead Compounds	Electric wire, cables or cords covered with thermosetting or thermoplastic resins	0.03% by weight (300 ppm) of lead in the outer cover
Lead / Lead Compounds	Batteries <sup>1</sup>	0.004% by weight (40 ppm) of lead in a battery
Lead / Lead Compounds	Metal Plating <sup>2</sup>	0.08% by weight (800 ppm) of lead in homogeneous material
Lead / Lead Compounds	Plastics <sup>2</sup>	0.01% by weight (100 ppm) of lead in homogeneous material
Mercury / Mercury Compounds	All except the subjects specified below	Intentional addition or 0.1% by weight (1,000 ppm) of mercury in homogeneous material <sup>3</sup>
Mercury / Mercury Compounds	Batteries <sup>1</sup>	Intentional addition or 0.0001% by weight (1 ppm) of mercury in a battery
Mercury / Mercury Compounds	Plastics <sup>2</sup>	0.01% by weight (100 ppm) of mercury in homogeneous material
Polybrominated Biphenyls (PBBs)	All	0.01% by weight (100 ppm) in homogeneous material <sup>3</sup>
Polybrominated Diphenyl Ethers (PBDEs)	All	Intentional addition or 0.01% by weight (100 ppm) in homogeneous material <sup>3</sup>
Bis(2-ethylhexyl)phthalate) (DEHP)	All	0.1 wt.% of intentional addition or homogeneous medium (1,000ppm)
Butyl benzyl phthalate (BBP)	All	0.1 wt.% of intentional addition or homogeneous medium (1,000ppm)
Dibutyl phthalate (DBP)	All	0.1 wt.% of intentional addition or homogeneous medium (1,000ppm)
Diisobutyl phthalate (DIBP)	All	0.1 wt.% of intentional addition or homogeneous medium (1,000ppm)

1. The reporting threshold for batteries is based on the most stringent legal requirements. However, statutory fundamental requirements apply solely to a single type of batteries, whereas the Standards set a single reporting threshold level for all types of batteries for simplification purposes.

2. Subject to the Green Procurement Standards for Customers

3. Packaging materials are separately subject to customers' requests.

**Revision History of the Standards for Management of Chemicals Contained in Products**

No.	Date	Descriptions	Created by	Approved by
1	2011.06.10	Added substances pursuant to JIG-101 Edition 4.0: diheptyl phthalate (DIHP), Di(heptyl, nonyl, undecyl) phthalate (DHNUP), [4-{bis-(4-dimethylaminophenyl)methylene}-2,5-cyclohexadiene-1-ylidene]dimethylammonium chloride (also known as C.I. Basic Violet 3) Changed the expression for the threshold levels.	Tabei	Minabe
2	2012.03.08	Complied with JIG-101 Edition 4.0.	Tabei	Minabe
3	2012.03.15	1. Added a threshold level of metal plating to Cadmium / Cadmium Compounds and to Lead / Lead Compounds. 2. Added a threshold level of plastics to Cadmium / Cadmium Compounds, to Hexavalent Chromium Compounds, to Lead / Lead Compounds, and to Mercury / Mercury Compounds. 3. Added footnote 11.	Tabei	Minabe
4	2012.07.20	Added substances in accordance with JIG-101 Edition 4.1: bis(2-methoxyethyl)ether, bis(2-methoxyethyl) phthalate, chlorine-based flame retardants, 2,2'-dichloro-4,4'-methylenedianiline (MOCA), N,N-dimethylacetamide (DMAC), pentazinc chromate octahydroxide, potassium hydroxyoctaoxidizincatedichromate, strontium chromate, 4-(1,1,3,3-tetramethylbutyl)phenol (also known as 4-tert-octylphenol)	Tabei	Minabe
5	2013.09.19	1. Changed the scope in the foreword 2. Corrected footnote numbers in the table.	Tabei	Minabe
6	2016.01.29	Complied with controlled substances under JAMP. Determined prohibited and controlled substances.	Tabei	Minabe
7	2016.04.01	Totally revised	Tabei	Minabe
8	2019.04.01	① In compliance with chemSHERPA ② CLP and ESIS PBT were deleted	Minabe	Tabei