



Guidelines for The Green Procurement
of
Nippon Chemi-Con Group

— Second Edition —

Established	July 1, 2005
Revised	October 1, 2009
Enforced	November 1, 2009

Nippon Chemi-Con Corporation

Introduction

While phrases such as “environmental compliance” and “energy-saving” are commonly used today to indicate the increased awareness of our environment, Nippon Chemi-Con Group companies, which are specialized manufacturers of aluminum electrolytic capacitors and other electronic parts and equipment, consider proactive efforts for environmental issues a key corporate responsibility. Accordingly, we operate in accordance with our corporate philosophy “Contribution to the technology with attention to environment and people.”

In connection with chemical substances contained in products, we have been promoting compliance with not only Europe’s RoHS Directive and REACH Regulation but also the requirements of customers.

In response to the recent trends in laws, regulations, and customers’ requirements, we have reviewed the list of specified chemical substances and revised our Guidelines for The Green Procurement.

We will continue to carry out green procurement activities together with our suppliers in an effort to reduce environmentally hazardous substances throughout the supply chain.

We gratefully appreciate your understanding of, as well as cooperation in our efforts in the above matter.

Nippon Chemi-Con Corporation
Material Procurement Department
Environment Department

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1. Positioning of Guidelines for The Green Procurement

(1) Purpose

The Guidelines for The Green Procurement specify requirements that must be observed in procuring materials, parts, products, etc. from suppliers.

(2) Scope of application

The Guidelines apply to materials, parts, products, and packaging materials procured by Nippon Chemi-Con Group companies (hereafter referred to as “procured items”) as well as to suppliers of such items.

“Nippon Chemi-Con Group companies” refers to Nippon Chemi-Con Corporation and all its subsidiaries and affiliated companies in and out of Japan (Nippon Chemi-Con Group companies are referred to as “our company” in the Guidelines).

(3) Maintenance of confidentiality

It should be noted that survey documents and other reference documents submitted to our company may be disclosed upon requests from public agencies or our customers.

In such cases, we will give thoughtful attention to ensure that suppliers cannot be identified in the disclosed information.

We will abide by the pertinent laws and regulations concerning proper handling of information in order to protect the private information of suppliers.

(4) Revision

The Guidelines are subject to revision due to reasons such as changes in laws, social demands, and technological advancement.

(5) Contact

For inquiries, please contact the following:

Nippon Chemi-Con Corporation

Material Procurement Department

Phone: +81-3-5436-7630

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Environment Department

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2. Definitions of terms

(1) Regulated chemical substances

“Regulated chemical substances” refers to chemical substances which have potential impact on the global environment, and our company deems it necessary to prohibit their use or monitor their inclusion in procured items.

1) Banned substances (22 substance groups)

“Banned substances” are certain regulated chemical substances whose containment in procured items is prohibited by our company.

2) Reportable substances (53 substance groups)

“Reportable substances” refers to chemical substances whose inclusion containment in procured items are not banned at present, but we think should be prohibited or restricted in the future, and our company deems it necessary to grasp information of containment of these chemical substances in procured items.

3) Substances of very high concern (SVHC)

SVHC refers to chemical substances in the SVHC candidate list announced by ECHA (European Chemicals Agency) and those designated as SVHC (listed in Annex XIV of the REACH Regulation).

(2) Containment

These terms refer to a condition in which a chemical substance has been added, filled, mixed in, or adhered to a procured item.

1) Intentional use

“Intentional use” refers to the addition of a certain chemical substance in a procured item for the purpose of realizing a specific function.

2) Impurity

An “impurity” is a substance which is contained in a natural material and cannot be removed completely during the manufacturing processes due to technical limitations, or a substance which is generated during a synthetic reaction process and cannot be removed due to technical limitations.

(3) Substances prohibited as containments

“Substances prohibited as containment” are chemical substances that are prohibited as a constituent in procured items. For substances for which our company prohibits intentional use and specifies a threshold limit, this term means that the concentration levels of said substances including impurities must be less than the threshold values specified by our company.

(4) Homogeneous materials

“Homogeneous materials” refers to practically homogeneous portion of procured items that are composed of multiple materials or parts. Examples of homogeneous materials are given on the following page.

(5) Threshold limits

“Threshold limits” are the permitted concentration levels of homogeneous materials in procured items.

(6) Plastic

“Plastic” refers to a material that includes high polymers, such as general-purpose plastic, engineering plastic, synthetic fiber, synthetic rubber, ink, paint, and adhesive.

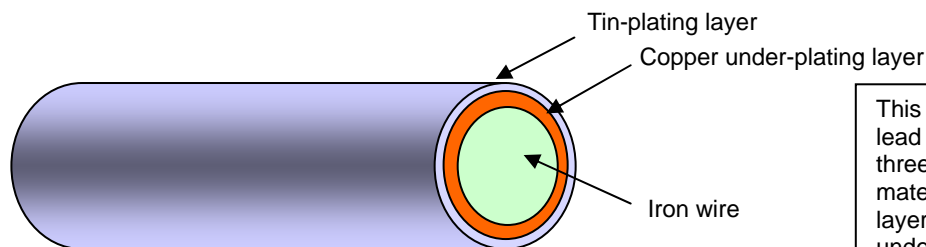
(7) Packaging materials

“Packaging materials” are materials used for transportation and protection of products, parts, and materials. Specifically, packaging materials include cardboard, tape, binding bands, bags, sheets, sticks, reels, trays, wooden materials, and shock absorbents, as well as labels, inks, paints, etc. used for indicating information on those materials.

Basic concept of homogeneous materials (examples)

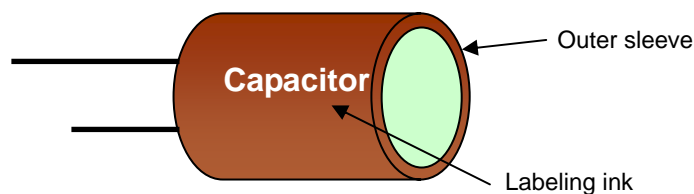
The following are examples of homogeneous materials.

Example 1: Lead wire



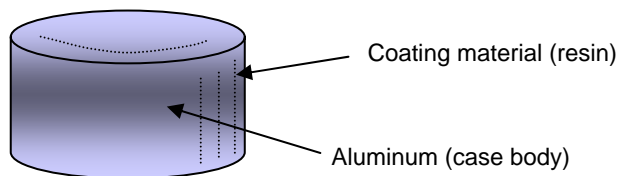
This example shows a lead wire that consists of three homogeneous materials: tin-plating layer, copper under-plating layer, and iron wire.

Example 2: Outer sleeve



In this example, the outer sleeve and labeling ink are homogeneous materials. Note that if different ink colors are used, each color is regarded as a different homogeneous material.

Example 3: Coated aluminum case



The aluminum case in this example is made of two homogeneous materials: case body (aluminum) and coating material (resin).

3. Investigation method

(1) Purpose of investigation

The purpose of investigation is to comprehend the conditions of chemical substances contained in items procured by our company. To that end, our company requests the submission of the latest information of chemical substances contained in each procured item.

(2) Scope of application

1) Applicability to materials, parts, and packaging materials

Investigation should be conducted for the following items procured by our company.

<A> Materials

Chemicals, metallic materials, resin polymers, inks, soldering materials, binders, pastes, adhesives, tapes, paper, rubber, etc.

 Parts

Composing parts, electronic parts, etc.

<C> Packaging materials

Applicable only to packaging materials for which our company requests the submission of data.

2) Applicability to supplementary materials

Whether or not to conduct investigation on supplementary materials used in manufacturing processes, such as consumables, shall be determined and specified by individual Nippon Chemi-Con Group companies.

3) For procured items not applicable to above 1) or 2), the instructions given by individual Nippon Chemi-Con Group companies shall be followed.

(3) Documents to be submitted

1) Certificate of Non-containment of Banned Chemical Substances in Products (CEM-3551-09A/E, Attached Document A)

The Certificate of Non-containment of Banned Chemical Substances in Products (CEM-3551-09A/E, Attached Document A) is a document to certify that the products supplied to our company by the supplier do not contain the substances (banned substances) listed in Annex A, "List of banned substances" of these Guidelines.

2) Results of Investigation of Reportable Substance (CEM-3551-09A/E, Attached Document B)

The Results of Investigation of Reportable Substance (CEM-3551-09A/E, Attached Document B) is a document to report the containment of a substance (reportable substance) listed in the Annex B, "List of reportable substances" of these Guidelines.

3) Analysis data

Actual analysis results must be submitted in order to verify that the threshold values specified by our company are satisfied in procured items.

<A> Analysis targets

Analysis shall be conducted for the following substances:

Metals: Pb, Cd, Hg, Cr6+ (4 substance groups)

Non-metals: Pb, Cd, Hg, Cr6+, PBB, PBDE (6 substance groups)

Packaging materials: Pb, Cd, Hg, Cr6+ (4 substance groups) (total of 4 substances)

 Analysis institution, analysis equipment

Our company recommends the supplier to submit high-precision analysis data obtained by an ISO/IEC17025-certified laboratory in compliance with IEC62321 or EN15205.

(The term “High-precision analysis data” refers to high-accuracy qualitative/quantitative data obtained by inductively-coupled plasma emission spectrometry (ICP-OES, ICP-AES), inductively-coupled plasma source mass spectrometry (ICP-MS), atomic absorption spectroscopy (AAS, FLAAS), ion chromatography (IC), gas chromatography mass spectrometry (GC-MS), hot-water-extraction diphenylcarbazide absorption photometry, etc.)

<C> Information to be provided in analysis data

The following information must be provided in the analysis data.

- a. Processing method: Describe the official method used, if any. If the method used is different from the official method, describe the actual method used. For the analysis of cadmium or lead in plastic, describe the method of achieving complete dissolution.
- b. Measurement method: Describe the name of the measurement method or the name of the official method.
- c. The name of institution, the name of the person who performed the measurement, and the name of the person responsible for the measurement (stamps or signatures).
- d. Date of measurement
- e. Measurement results: In the case of “not detectable (N.D.),” indicate the minimum limit of determination.
- f. Measurement flow chart

<D> Check that the submitted analysis data are not older than one year from the date of analysis.

4) Composition table

A composition table is a document that indicates the main components of a procured item and attests that “banned substances” are not contained.

MSDS* (Material Safety Data Sheet), steel mill sheet, JAMP MSDS plus, JAMP AIS sheet, etc. can substitute, but if the provided information of components is insufficient, our company may request the supplier to prepare and submit a more detailed composition table. If some components are regarded as trade secrets and concrete names of certain chemical substances cannot be disclosed, please add the following comment: “Components that are not disclosed in the document do not contain any banned substances specified by your company.”

* Any MSDS submitted must be in the format (JIS Z7250-2005) that complies with the GHS (The Globally Harmonized System of Classification and Labeling of Chemicals), as a general rule. Note that those submitted in the past must be resubmitted promptly, in accordance with the revised Occupational Health and Safety Law.

5) Investigation on substances of very high concern (SVHC) specified by EU REACH Regulation

Please refer to Annex C.

(4) Other

1) Exemptions from the application of RoHS Directive and ELV Directive

See our company's website or contact our company regarding exemptions from the application of RoHS Directive and ELV Directive.

2) Provision of information according to individual requests

Our company may request the supplier to provide specific information in some cases.

<Examples of request>

<A> Additional investigation mandated by amendment of law, etc.

 Halogen-free guarantee

<C> Trade-control-related document

3) Reply form and resubmission

<A> Reinvestigation or submission of reply is not required by the recent revision of the Guidelines for The Green Procurement.

If reinvestigation or submission of reply is required, our company will make a specific request. If such a need arises, we kindly request the supplier's cooperation.

 If the supplier believes there is a need for revision or resubmission due to a change in 4M (Man, Machine, Material, Method) or other reason, please submit the necessary documents.

4) Indication of non-containment of chemical substances on invoices

To indicate that banned substances are not contained in items procured by our company, please indicate in the document (invoice, test data report, etc.) provided to our company at the time of product delivery the following statement or a statement to the same effect: "The product delivered to your company does not contain banned substances specified by your company."

Regarding the latest reply forms and SVHC candidate list, visit our website and navigate to: "CSR/Environment" ⇒ "Green Procurement/Purchase" ⇒ "Outline of the Green Procurement" (See the URLs below).

Japanese: <http://www.chemi-con.co.jp/env/green2.html>

English: <http://www.chemi-con.co.jp/e/env/green2.html>

4. Standards for control of chemical substances contained in products

(1) Banned substances (22 substance groups)

"Banned substances" are certain regulated chemical substances whose inclusion in procured items is prohibited by our company.

These chemical substances (chemical substance groups) are listed in the table in Annex A.

(2) Reportable substances (53 substance groups)

"Reportable substances" refers to chemical substances whose inclusion in procured items are not banned at the present, but we think should be prohibited or restricted in the future, and our company deems it necessary to monitor inclusion of these chemical substances in procured items.

These chemical substances (chemical substance groups) are listed in the table in Annex B.

(3) Substances of very high concern (SVHC)

SVHC refers to chemical substances in the SVHC candidate list announced by ECHA (European Chemicals Agency) and those designated as SVHC (listed in Annex XIV of the REACH Regulation).

These substances are listed in Annex C (Attached Document 1). However, as ECHA (European Chemicals Agency) updates the information as needed, visit our website for the latest version.

<http://www.chemi-con.co.jp/env/green2.html>

5. Nippon Chemi-Con Green Supplier Approval System

Our company initiated the Nippon Chemi-Con Green Supplier Approval System on April 1, 2007, and confirms the system for control of chemical substances contained in products operated by each supplier.

Regarding the Nippon Chemi-Con Green Supplier Approval System, visit our website.

<http://www.chemi-con.co.jp/env/green2.html>

* Regarding the Environmental Management System Survey Form (CEM-3555) that is in use, please submit it only when our subsidiary or affiliated company makes a request for such. (Visit our website to obtain the survey form.)

6. Revision history

No.	Modification	Date	Revision No.
1	First edition released	July 1, 2005	05A
2	(1) General contents, expressions, and terms were reviewed. (2) The standards for control of chemical substances contained in products were reviewed. Deletion of controlled chemical substances, agricultural chemicals, insecticides, etc. Addition of newly regulated substances such as PFOS (3) Consolidation of Annex C (issued on December 1, 2008)	October 1, 2009	09A

Annex A List of Banned substances

(A) List of Banned substances		Name of Substances	CAS NO.	Threshold limit	Usage / Memo
A1	Ozone depleting substances	Specific frons and halons (CFC,HCFC,HBFC)	Several		
		Bromomethane	74-83-9		
		Bromochloromethane	74-97-5		
		1,1,1-Trichloroethane	71-55-6		
		Tetrachloromethane	56-23-5		
A2	PCB, PCT and its substitutes	PCB (Polychlorinated biphenyls)	1336-36-3		
		PCT (Polychlorinated terphenyls)	61788-33-8		
		Monomethyldibromodiphenylmethane (DBBT)	99688-47-8		
		Monomethyldichlorodiphenylmethane (Ugilec121/21)	-		
		Monomethyltetrachlorodiphenyl	-		
A3	Hexachlorobenzene	Monomethyltetrachlorodiphenyl-methane (Ugilec141)	76253-60-6		
A4	PBB (Polybrominated biphenyls)	118-74-1			
A5	PBDE (Polybrominated diphenyl ethers)	36355-01-8	1000ppm		
A7	PCN (Polychlorinated naphthalenes (with more 3 chlorine atoms)	Several	1000ppm		
A8	Chlorinated parafins	Several			
A10	bis (chloromethyl) ether	542-88-1			
A13	Azo compounds and aromatic amines (Refer to the attached table 1)	Several			Applicable for those may continuously come in contact with human skin
A15	Vinyl Chloride	75-01-4			Except monomer residue in polyvinyl chloride (PVC)
A16	Asbestos (including erionite and asbestos talc)	(1332-21-4)			
A17	Specific organic tin compounds (Triphenyl tin compounds and Tributyl tin compounds)	Several			
A18	Mercury and its compounds Alkyl mercury compounds	(7439-97-6)	1000ppm *1		
		Several	1000ppm *1	Threshold limit as a mercury : 1000ppm	
A19	Cadmium and its compounds	(7440-43-9)	100ppm *1		Threshold limit of rubber, plastic, ink, paints : 5ppm
A20	Hexavalent Chromium and its compounds	(18540-29-9)	1000ppm *1		
A21	Lead and its compounds	(7439-92-1)	1000ppm *1		Threshold limit of rubber, plastic, ink, paints : 100ppm
A22	Formaldehyde	50-00-0			Except those do not remain in the final products. Banned in principle
A23	Cyanides (1)	Several			1) Except Cyanoacrylate(CAS№7085-85-0) contained in the superglue 2) Except Dicyandiamide(CAS№461-58-5) contained in the curing agent
A24 (IB21)	Bisphenol A (4,4'-dihydroxydiphenyl-2,2-propane), (4,4'-isopropylidenediphenol)	80-05-7			Except Bisphenol A type resin, and unreacted
A25	Specific Benzotriazole 2-(2H-1,2,3-benzotriazol-2-yl)-4,6-di-tert-butylpheno	Several (3846-71-7)			
A26	PFOs (Perfluorooctane sulfonate) (Acid or Salt of C8F17SO3, C8F17SO2F(PFOSE))	(1763-23-1)			
A27	Dimethyl fumarate (Fumaric acid dimethyl, DMF)	624-49-7			(Note) Different substance from #B31 DMF (N,N'-dimethylformamide)
A00	SVHC (Annex C)				*2 (Investigation of SVHC is conducted under Annex C)

*1 The total of Pb,Cd,Hg,Cr6+ must be less than 100ppm for packaging materials

*2 Investigation of SVHC is conducted by Annex C, not by the "Certificate of Non-containment".

In case SVHC in Annex C and substances in Annex A or B duplicate, please answer for each investigation.

*3 Exempted in cases there is/are delivery specifications or drawings are exchanged between supplier and Nippon Chemi-Con, and are permitted to use/contain such substances.

Annex A Table 1

Table 1 (A13 substance) Specific amines that must not be generated when Azo compounds decomposed

	Name of substance	CAS No
1	4-Aminobiphenyl	92-67-1
2	Benzidine	92-87-5
3	4-Chloro-o-toluidine	95-69-2
4	2-Naphthylamine	91-59-8
5	o-Aminoazotoluene	97-56-3
6	2-Amino-4-nitrotoluene	99-55-8
7	p-Chloroaniline	106-47-8
8	2,4-Diaminoanisole	615-05-4
9	4,4'-Diaminodiphenylmethane	101-77-9
10	3,3'-Dichlorobenzidine	91-94-1
11	3,3'-Dimethoxybenzidine	119-90-4
12	3,3'-Dimethylbenzidine	119-93-7
13	3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0
14	p-Cresidine	120-71-8
15	4,4'-methylene-bis-(2-chloroaniline)	101-14-4
16	4,4'-Oxydianiline	101-80-4
17	4,4'-Thiodianiline	139-65-1
18	o-Toluidine	95-53-4
19	2,4-Toluylenediamine	95-80-7
20	2,4,5-Trimethylaniline	137-17-7
21	o-Anisidine	90-04-0
22	4-Aminoazobenzene	60-09-03

(month) (day), (year)

To: Nippon Chemi-Con Corporation

()

From: Company name: (company stamp)

Name of manager: (signature or stamp)

Certificate of Non-containment of Banned Chemical Substances in Products

We, _____ (and our subsidiaries and affiliated companies), hereby certify that we do not intentionally include the chemical substances listed below in our products (including raw materials, parts and supplementary materials such as packaging materials) that we supply either directly or indirectly through a third party to Nippon Chemi-Con Corporation (or its subsidiaries or affiliated companies). Furthermore, with regard to chemical substances with a regulated value, we also certify that we do not include such chemical substances in our products in excess of the regulated value intentionally or unintentionally.

Chemical substances subject to the above

No.	Name of the substance or its group
A1	Ozone depleting substances
A2	PCB, PCT and its substitutes
A3	Hexachlorobenzene
A4	PBB (Polybrominated biphenyls)
A5	PBDE (Polybrominated diphenyl ethers)
A7	PCN (Polychlorinated naphthalenes with more than 3 chlorine atoms)
A8	Chlorinated parafins (Shortchain Chlorinated parafin)
A10	Bis (chloromethyl) ether
A13	Azo compounds and aromatic amines (*)
A15	Vinyl chloride monomer (Chloroethylene) (*)
A16	Asbestos (including Tarc or Erionite containing Asbestos,)
A17	Specified organic tin compounds (Triphenyltin and Tributyltin compounds)
A18	Mercury and its compounds (including alkyl Mercury compounds) (*)
A19	Cadmium and its compounds (*)
A20	Hexavalent chromium compounds (*)
A21	Lead and its compounds (*)
A22	Formaldehyde (*)
A23	Cyanides (excluding Cyanoacrylate, Dicyandiamide) (*)
A24	Bisphenol-A (*)
A25	Specified benzotriazole
A26	PFOS (Acid or Salt of C8F17SO3, C8F17SO2F(PFOSF))
A27	Dimethyl fumarate (Fumaric acid dimethyl, DMF)

Details related to the chemical substances listed above such as the sphere are stated in the Guidelines for the Green Procurement of Nippon Chemi-Con Group (Document No. "CEM-3551-09A" issued on Oct 1, 2009).

Chemical substances marked with an asterisk (*) have conditions for restrictions and exceptions, etc.

Annex B List of Reportable substances

No	Name of Substances	CAS NO.	Threshold limit	Usage / Memo
B1	Methylene chloride (Dichloromethane)	75-09-2		
	1,1,2-Trichloroethane	79-00-5		
	1,1-Dichloroethane	75-34-3		
	1,2-Dichloroethane	107-06-2		
	1,1-Dichloroethylene	75-35-4		
	1,2-Dichloroethylene	540-59-0		
	1,3-Dichloropropene	542-75-6		
	cis-1,2-Dichloroethylene	156-59-2		
	1,1,1,2-Tetrachloroethane (solvent, cleanser)	630-20-6		
	1,1,1,2-Tetrachloroethane	79-34-5		
	Pentachloroethane	76-01-7		
	Chloroform (Trichloromethane)	67-66-3		
	Trichloroethylene	79-01-6		
	Tetrachloroethylene	127-18-4		
	Brominated flame retardants (except PBB, PBDE)	Several		
	Hexabromocyclododecane (HBCDD)	25637-99-4		
	B10	Dioxins	-	
dibenzofurans		132-64-9		
Chloromethyl methyl ether		107-30-2		
Benzene		71-43-2		
Toluene		108-88-3		Except for use in solvent of ink/paint and does not remain in the final products (below analysis detection limit)
Xylene		1330-20-7		Except for use in solvent of ink/paint and does not remain in the final products (below analysis detection limit)
Benzotrichlorid		98-07-7		
Pentachlorophenols		(87-86-5)		
Magenta (Fuchsine, basic)		632-99-5		
Auramine (basic yellow #2)		2465-27-2		
Picric acid (Trinitrophenol)		492-80-8		
		88-89-1		
		117-81-7		
		84-74-2		
B22	Diethyl phthalate (DEHP)	85-68-7		
	Dibutyl phthalate (DBP)	84-74-2		
	n-Butyl benzyl phthalate (BBP)	85-68-7		
	Diisononyl phthalate (DINP)	28553-12-0		
	Diisodecyl phthalate (DIDP)	26761-40-0		
	n-Dioctyl phthalate (DNOP)	117-84-0		
	Other phthalic esters	Several		
	Ethyleneimine	151-56-4		
	N-nitrosamide	Several		
	N-nitrosamine	Several		
B23	N-nitrosodietanolamine	1116-54-7		
	Dimethylamine	124-40-3		
	Dimethyl acetamide (DMA)	127-19-5		
	N-methyl acetamide (NMA)	79-16-3		
	N-methyl Formamide (NMF)	123-39-7		
	N,N'-dimethylformamide (DMF)	68-12-2		
				Except for experimentation or testing purposes
				Except residue (less than 10 ppm) in the hardened ink/paint
				(Memo) Different substance from #B27 DMF

Annex B List of Reportable substances (Continued from P12)

(B) List of Reportable substances (Continued from previous page)

No	Name of Substances	CAS NO.	Threshold limit	Usage / Memo
B33	Acrylonitrile	107-13-1		
B35	beta-Propiolactone	57-57-8		
B37	Acetaldehyde	75-07-0		
B38	Epichlorohydrin	106-89-8		
B39	Treosulfan	299-75-2		
	Methyl cellosolve (Ethylene glycol monomethyl ether)	109-86-4		
	Cellosolve (Ethylene glycol monoethyl ether)	110-80-5		
B45	Cellosolve acetate	111-15-9		
	Methyl cellosolve acetate	110-49-6		
	Diethylene glycol dimethyl ether (Diglyme)	111-96-6		
B48	Polyvinyl chloride (PVC) and its compounds	9002-86-2		Stabilizer must be an organic tin type
	Perfluorocarbons (PFC)	Several		
B49	Hydrofluorocarbons (HFC)	Several		
	Dinitrogen monoxide	10024-97-2		
	Sulfur hexafluoride (SF6)	2551-62-4		
B50	Hydrazine	302-01-2		
B51	Cyanides (Cyanacrylate, Dicyandiamide)	7085-85-0		Can only be used for superglue (Cyanocrylate CAS№7085-85-0)
		461-58-5		Can only be used for curing agent (Dicyandiamide CAS№461-58-5)
B54	Organic tin compounds (other than the above mentioned)	Several		
B56	Metal carbonyls	Several		
B61	Lead and its compounds	(7439-92-1)		Can only be used upon Nippon Chemi-Con's request (RoHS exempted, Specific customer's requirement etc)
B62	Antimony and its compounds	(7440-36-0)		Can only be used for additive of polyolefin resin
B63	Arsenic and its compounds	(7440-38-2)		
B64	Beryllium and its compounds	(7440-41-7)		
B66	Cobalt and its compounds (except carbonyl compounds)	(7440-48-4)		Can be used for following purposes 1) ingredient of Varistor element 2) Impurity in chromate treatment 3) Cobalt in amorphous ribbon 4) Cobalt in Au plating
B67	Nickel compounds (except metal and carbonyl compounds)	Several		Applicable for those may continuously come in contact with human skin
B68	Selenium and its compounds	(7782-49-2)		
B71	Radioactive substances(U,Pu,Rn,Am,Th)	Several		
B72 (Former A12)	4-nitrodiphenyl and its salt	(92-93-3)		
B73 (Former A14)	2,4,6-tri-tert-butylphenol	732-26-3		
B74 (Former A13)	Azo compounds p-dimethylaminobenzene N,N'-ditonil-p-phenylene diamine (PDA=T2) N'-ditolyl-N'-xylyl-p-phenylenediamine (PDA-TX) N,N'-dixylyl-p-phenylenediamine (PDA-X2)	(134-32-7) 60-11-7 27417-40-9 28726-30-9 70290-05-0		
B75	Hexachlorobutadiene	87-68-3		
B76	N-Phenyl-2-naphthylamine(β-)	135-88-6		
B77	Diethylamine	109-89-7		
B78	Triethylamine	121-44-8		
B79	Polycyclic Aromatic Hydrocarbon	Several		
B80	Tar oil / Coal tar	- /8007-45-2		
B81	PFOA (Perfluoroacetic acid)	335-67-1		
B82	Perchloric acid	7601-90-3	6ppb	

Result of Investigation of Reportable Substances

Date of response:	Division in charge:
Company name :	Title and Name of the person completing this form :
Name of raw material manufacturer :	Telephone no. for inquiries :
Name of supplied goods (or series name, etc.) :	Mass of the product per investigation unit (gram) :
Investigation unit :	None containment :

Points to note when completing this form.

To complete this form, refer to the Manual for the Controlled Chemical Substances of Nippon Chemi-Con Corporation.

None containment : If none of the chemical substances listed below is contained, write "0".

Name of supplied goods : Write the name of the goods stated in the specifications of the supplied goods, etc.

Series name, etc.: In the case of the same supplied goods and of the same amount of containment, write the series name or size, etc.

Investigation unit : Write the investigation unit used for this report (such as per unit, per m2 or per liter).

Containment : In case of containment of the relevant substance, draw a circle.

Containing part: Describe the containing part in a way that is easy to understand by using the name stated in the specifications of the supplied goods, etc.

Contained amount (mg): Please state the value in two significant figures.

No.	Chemical substance name	CAS No.	Containment	Name of the containing part	Mass of the containing part	Contained Amount(mg) or Contained Density
B1	Organic chlorine compounds (solvent, cleanser)					
	Methylene chloride (Dichloromethane)	75-09-2				
	1,1,2-Trichloroethane	79-00-5				
	1,1-Dichloroethane	75-34-3				
	1,2-Dichloroethane	107-06-2				
	1,1-Dichloroethylene	75-35-4				
	1,2-Dichloroethylene	540-59-0				
	1,3-Dichloropropene	542-75-6				
	cis-1,2-Dichloroethylene	156-59-2				
	1,1,1,2-Tetrachloroethane	630-20-6				
	1,1,1,2,2-Tetrachloroethane	79-34-5				
	Pentachloroethane	76-01-7				
	Chloroform (Trichloromethane)	67-66-3				
	Trichloroethylene	79-01-6				
Tetrachloroethylene	127-18-4					
B10	Brominated flame retardants (except PBB, PBDE)	Several				
	Hexabromocyclododecane (HBCDD)	25637-99-4				
B11	Dioxins					
	dibenzofurans	132-64-9				
B12	Chloromethyl methyl ether	107-30-2				
B13	Benzene	71-43-2				
B14	Toluene	108-88-3				
B15	Xylene	1330-20-7				
B16	Benzotrichlorid	98-07-7				
B17	Pentachlorophenols	(87-86-5)				
B18	Magenta (Fuchsine, basic)	632-99-5				
B19	Auramine (basic yellow #2)	2465-27-2				
		492-80-8				
B20	Picric acid (Trinitrophenol)	88-89-1				
B22	Phthalic esters					
	Diocetyl phthalate (DEHP)	117-81-7				
	Dibutyl phthalate (DBP)	84-74-2				
	n-Butyl benzyl phthalate (BBP)	85-68-7				
	Diisononyl phthalate (DINP)	28553-12-0				
	Diisodecyl phthalate (DIDP)	26761-40-0				
	n-Dioctyl phthalate (DNOP)	117-84-0				
	Other phthalic esters	Several				
B23	Ethyleneimine	151-56-4				
B24	N-nitrosamide	Several				
B25	N-nitrosamine	Several				

Result of Investigation of Reportable Substances

No.	Chemical substance name	CAS No.	Containment	Name of the containing part	Mass of the containing part	Contained Amount(mg) or Contained Density
B26	N-nitrosodiethanolamine	1116-54-7				
B27	Dimethylamine	124-40-3				
B28	Dimethyl acetamide (DMA)	127-19-5				
B29	N-methyl acetamide (NMA)	79-16-3				
B30	N-methyl Formamide (NMF)	123-39-7				
B31	N,N'-dimethylformamide (DMF)	68-12-2				
B33	Acrylonitrile	107-13-1				
B35	beta-Propiolactone	57-57-8				
B37	Acetaldehyde	75-07-0				
B38	Epichlorohydrin	106-89-8				
B39	Treosulfan	299-75-2				
B45	Glycol ethers and its acetates					
	Methyl cellosolve (Ethylene glycol monomethyl ether)	109-86-4				
	Cellosolve (Ethylene glycol monoethyl ether)	110-80-5				
	Cellosolve acetate (Ethylene glycol monoethyl ether acetate)	111-15-9				
	Methyl cellosolve acetate (Ethylene glycol monomethyl ether acetate)	110-49-6				
	Diethylene glycol dimethyl ether (Diglyme)	111-96-6				
B48	Polyvinyl chloride (PVC) and its compounds	9002-86-2				
B49	Greenhouse gases					
	Parfluorocarbons (PFC)	Several				
	Hydrofluorocarbons (HFC)	Several				
	Dinitrogen monoxide	10024-97-2				
	Sulfur hexafluoride (SF6)	2551-62-4				
B50	Hydrazine	302-01-2				
B51	Cyanides (Cyanoacrylate, Dicyandiamide)	7085-85-0 461-58-5				
B54	Organic tin compounds (other than the above mentioned)	Several				
B56	Metal carbonyls	Several				
B61	Lead and its compounds	(7439-92-1)				
B62	Antimony and its compounds	(7440-36-0)				
B63	Arsenic and its compounds	(7440-38-2)				
B64	Beryllium and its compounds	(7440-41-7)				
B66	Cobalt and its compounds (except carbonyl compounds)	(7440-48-4)				
B67	Nickel compounds (except metal and carbonyl compounds)	Several				
B68	Selenium and its compounds	(7782-49-2)				
B71	Radioactive substances(U,Pu,Rn,Am,Th)	Several				
B72 (Former A12)	4-nitrodiphenyl and its salt	(92-93-3)				
B73 (Former A14)	2,4,6-tri-tert-butylphenol	732-26-3				
B74 (Former A13)	Azo compounds and their aromatic amines					
	1-Aminonaphthalene(1-Naphthylamine) and its salt	(134-32-7)				
	p-dimethylaminoazobenzene	60-11-7				
	N,N'-ditoril-p-phenylene diamine (PDA=T2)	27417-40-9				
	N'-ditolyl-N'-xylyl-p-phenylenediamine (PDA-TX)	28726-30-9				
	N,N'-dixyllyl-p-phenylenediamine (PDA-X2)	70290-05-0				
B75	Hexachlorobutadiene	87-68-3				
B76	N-Phenyl-2-naphthylamine(-β-)	135-88-6				
B77	Diethylamine	109-89-7				
B78	Triethylamine	121-44-8				
B79	Polycyclic Aromatic Hydrocarbon	Several				
B80	Tar oil / Coal tar	- /8007-45-2				
B81	PFOA (Perfluorooctanoic acid)	335-67-1				
B82	Perchloric acid	7601-90-3				

Annex C

Submission of Documents corresponded with European REACH Regulation

1. Scope

It is the same as Guidelines for the Green Procurement of Nippon Chemi-Con Group (CEM-3551-09A/E) .

2. Requirement

After December 1, 2008, in case SVHC is contained (and also in case we require), we ask you for the disclosure of SVHC contained information by “AIS sheet” or “MSDS plus sheet” by JAMP or Results of Investigation of Reportable Substance (SVHC) on top of “Certificate of Non-containment” and “Results of Investigation of Reportable Substance” which were previously submitted to us.

“Contained” here means the following cases:

- 1) Intentionally added (used)
- 2) Information of Containment is known by certain means.

For example, when even minute amount is contained or potentially contaminated in manufacturing process.

In case SVHC candidates or SVHC substances are not contained, and in case we do not require, the submission is unnecessary.

3. Submission material

- 1) In case substances in the SVHC list, described in the clause 4 below, are contained, the submission form must be either “AIS sheet” or “MSDS plus sheet” or “Results of Investigation of Reportable Substance (SVHC)” provided by Nippon Chemi-Con Corporation.

(Please use the Version 3 or its subsequent for “AIS sheet” and “MSDS plus sheet“. For detail, please refer to the clause 5 below.)

Note: Although “AIS sheet” and “MSDS plus sheet” of JAMP for the reporting forms, we do not require you to inform us of the substance lists established by JAMP such as 67/548/EEC, 76/769/EEC, ELV, RoHS, JIG, GADSL for this occasion.

- 2) In order to take through measures for the application of this Annex, we ask for the submission of “Receipt Confirmation” which is the Attached Sheet 5.
- 3) Submission material should be addressed to the Material Procurement Department of Nippon Chemi-Con Corporation.

4. Chemical Substance List

The subjected chemical substances of this Annex are shown in the Attached Sheet 1.

These substances are the SVHC Candidate substances and SVHC substances (published in the Annex XIV of the REACH Regulation) announced by ECHA (European Chemical Agency). The Attached Sheet 1 will be updated as needed according to announcement and addition by ECHA.

Note: Please refer to the Nippon Chemi-Con Corporation’s website for the latest list. As soon as official announcement is made, it will be updated successively.

<http://www.chemi-con.co.jp/env/green2.html>

5. Terminology, Making Process and Reply Tool

Please send us your reply by using the following tool(s).

* If you can manage with the form of JAMP, please use (1). If not, please use (2) which is the Attached Sheet 4.

(1) JAMP AIS (Article Information Sheet) and JAMP MSDS plus

Terminology, making process and reply tool are published on the following website of JAMP. The latest edition can be downloaded and browsed from the relative website.

JAMP (Joint Article Management Promotion-consortium)

1) JAMP AIS Published website <http://www.jamp-info.com/glais/>

Please send us your reply via electronic file (in the Excel form).

2) JAMP MSDS plus Published website <http://www.jamp-info.com/glmsds/>

Please send us your reply via electronic file (in the Excel form).

(2) Results of Investigation of Reportable Substance (SVHC) (Attached Sheet 4)

1) Please send us your reply using the Attached Sheet 4 of “the Results of Investigation of Reportable Substance (SVHC) which is the form of Nippon Chemi-Con Corporation.

6. Others

(1) The documents of Annex, which are used in this Annex, are subject to change according to the revision of regulations and the changes of social circumstances, etc.

(2) This Annex (Annex C) shall be implemented on December 1, 2008.

<Reference>

Regarding how to obtain information about JAMP (Joint Article Management Promotion-consortium)

1) Gathering information from the website of JAMP <http://www.jamp-info.com/>

2) Participation in briefings hosted by JAMP (For Non-member, Member)

3) Membership for JAMP (Membership Fee 40,000~120,000yen/ Year: it depends on the corporate scale.)

Note: Please refer to the Nippon Chemi-Con Corporation's website for the latest list. As soon as official announcement is made, it will be updated successively.

<http://www.chemi-con.co.jp/env/green2.html>

(1) SVHC Candidate list

	Substance name	CAS number	EC number	Basis for identification as a SVHC
1	Anthracene	120-12-7	204-371-1	Persistent, bioaccumulative and toxic
2	4,4'-Methylenedianiline (4,4'-Diaminodiphenylmethane)	101-77-9	202-974-4	Carcinogen, cat. 2
3	Dibutyl phthalate	84-74-2	201-557-4	Toxic for reproduction, cat. 2
4	Cobalt dichloride	7646-79-9	231-589-4	Carcinogen, cat. 2
5	Diarsenic pentaoxide	1303-28-2	215-116-9	Carcinogen, cat.1
6	Diarsenic trioxide (Arsenic(III) oxide)	1327-53-3	215-481-4	Carcinogen, cat.1
7	Sodium dichromate dihydrate Sodium dichromate	7789-12-0 10588-01-9	234-190-3	Carcinogen, cat. 2; Mutagen, cat. 2 Toxic for reproduction, cat. 2
8	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4	Very persistent and very bioaccumulative
9	Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7	204-211-0	Toxic for reproduction, cat.2
10	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (alpha-HBCDD, beta-HBCDD gamma-HBCDD)	25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8)	247-148-4 and 221-695-9	Persistent, bioaccumulative and toxic
11	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	287-476-5	Persistent, bioaccumulative and toxic Very persistent and very bioaccumulative
12	Bis(tributyltin)oxide	56-35-9	200-268-0	Persistent, bioaccumulative and toxic
13	Lead hydrogen arsenate	7784-40-9	232-064-2	Carcinogen, cat. 1 Toxic for reproduction cat. 1
14	Triethyl arsenate	15606-95-8	427-700-2	Toxic for reproduction, cat.2
15	Benzyl butyl phthalate	85-68-7	201-622-7	Carcinogen, cat. 1

(2) SVHC (finalized) substances (substances listed on the Annex XIV of the REACH Regulation)

*As of October 16, 2008, there is no substance published on the Annex XIV of the REACH regulation.

Please confirm the Website of Nippon Chemi-Con Corporation after June 2011.

JAMP AIS Sheet

4. Composition Information

Article Mass	
Unit type	Unit of Mass
Mass	g
Select from the List	Select from the List
Fill in	g
1. Piece	

Information Content	
	Select from the List
GADSL	1. covers GADSL scope
JIG	1. covers JIG scope

5. Other Information

Declaration Concerning Composition Information
Select from the List
1. This article is confirmed to contain declarable

Reference Documents, Notes	Optional

Red letters : Required field

Level		Component				Material				Substance				
Name	Quantity	Component Name	Quantity	Use	Material Name	Material Classification Number	Material Code of Public Standard	Material Mass	Unit	Substance Name	CAS Number	Concentration (wt%)	Substance Mass	Unit
Fill in	Fill in	Fill in	Fill in	Select	Fill in	Auto	Fill in	Fill in	Select	Auto	Auto	Fill in	Auto	Auto

JAMP MSDSplus

Sheet Reference Number	Optional	ANEX
Format Version	Auto	Ver.3.0
Date Originally Issued (yyyy-mm-dd)	Required	
Date of Latest Revision (yyyy-mm-dd)	Required	
Revision History (1,2,3,...,999)	Optional	1
GP Sheet ID	Optional	

This sheet provides supplemental chemical information of our product not covered by MSDS. Please refer to this sheet associating with MSDS.

1. Product Information

Product name	Required	
Item Number	Optional	
Common Product Name	Required	

2. Company Information

Company Name	Required	
Company Organization ID	Optional	
Company Industry ID	Optional	
JAMP Member Company ID	Optional	
Address	Required	
Issuing Department	Required	
Telephone Number of Issuing Department	Required	
FAX Number of Issuing Department	Optional	
Email Address of Issuing Department	Optional	
Department in Charge of Preparing MSDSplus	Optional	
Telephone Number of Department in Charge of Preparing MSDSplus	Optional	
Remarks	Optional	

3. Substance Information

1. This product contains the following substance(s) listed in the relevant standard and to be notified

Substance(s) To Be Notified			Relevant Standard *1												Remarks *2
Substance Name	CAS Number	Max. Concentration (wt%)	JP 01	JP 02	JP 03	EU 01	EU 02	EU 03	EU 04	EU 05	OT 01	IA 01	IA 02		
	Fill in	Fill in	Auto												Fill in

4. Relevant Standard Information

Required Standard

Code	Relevant Standard	Issued or revised
		Fill in
JP01	Japanese Chemical Substances Control Law (Class I Specified Chemical Substances)	2007-10-31
JP02	Industrial Safety and Health Act (Substances Prohibited of Manufacturing etc.)	2007-09-07
JP03	Poisonous and Deleterious Substances Control Law (Specified Poisonous Substances)	2007-08-15
EU01	RoHS Directive	2002/95/EC
EU02	ELV Directive	2000/53/EC
EU03	67/548/EEC [Annex I CMR-Cat1,2]	2008/58/EC
EU04	76/769/EEC [Except EU03]	2007/51/EC
EU05	REACH SVHC on the Candidate List	2008-10-28

Optional Standard (Recommend to report)

Code	Relevant Standard	Information Content	Issued or revised
		Selection	Fill in
OT01	ESIS PBT [Fulfilled] When contained, symbol is "1"	1. covers PBT	2008-10-28
IA01	GADSL When contained, symbol is "P", "D" or "P/D"	1. covers GADSL scope	2008 Ver.2.0 (2008-09-01)
IA02	JIG JIG-A only When contained, symbol is "A"	1. covers JIG scope	JIG101A 2007

*1 "1 (or symbols that mean to be contained)" is marked if a substance listed in the relevant standard and to be notified is intentionally added or known to be contained.

"1 (or symbols that mean to be contained)" does not directly mean legally regulated. It depends on use and other conditions.

*2 Notified if there is additional information

*3 For more information please refer to "How to make JAMP MSDSplus".

*4 The information herein is given in good faith, but no warranty, express or implied, is made. It is the user's responsibility and completeness of this information for his own particular use.

Results of Investigation of Reportable Substance (SVHC)

Date of response:		Division in charge:	
Company name :		Title and Name of the person completing this form :	
Name of raw material manufacturer :		Telephone no. for inquiries (TEL) :	
Name of supplied goods (or series name, etc.) :		Mass of the product per investigation unit (gram) :	
Investigation unit :			

Points to note

To complete this form, refer to the Manual for the Controlled Chemical Substances of Nippon Chemi-Con Corporation.
Name of supplied goods : Write the name of the goods stated in the specifications of the supplied goods, etc.
Series name, etc.: In the case of the same supplied goods and of the same amount of containment, write the series name or size, etc.
Investigation unit : Write the investigation unit used for this report (such as per unit, per m2 or per liter).
Containment : In case of containment of the relevant substance, draw a circle.
Containing part: Describe the containing part in a way that is easy to understand by using the name stated in the specifications of the supplied goods, etc.
Contained amount (mg): Please state the value in two significant figures.

No.	Chemical substance name	CAS No.	Containment	Name of the containing part	Mass of the containing part	Contained Amount(mg) or Contained Density
1	Anthracene	120-12-7				
2	4,4'- Diaminodiphenylmethane	101-77-9				
3	Dibutyl phthalate	84-74-2				
4	Cobalt dichloride	7646-79-9				
5	Diarsenic pentaoxide	1303-28-2				
6	Diarsenic trioxide	1327-53-3				
7	Sodium dichromate	7789-12-0 10588-01-9				
8	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2				
9	Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7				
10	Hexabromocyclododecane (HBCDD)	25637-99-4				
11	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8				
12	Bis(tributyltin)oxide	56-35-9				
13	Lead hydrogen arsenate	7784-40-9				
14	Triethyl arsenate	15606-95-8				
15	Benzyl butyl phthalate	85-68-7				

To: Nippon Chemi-Con Corporation Material Procurement Department

Receipt Confirmation

We hereby confirm that we received the below Annex C.

“Guidelines for the Green Procurement of Nippon Chemi-Con Group Annex C”

Date of Receipt	Month/ Date/ Year	
Company Name (Name of Business Place)		
Authorized Department		
Authorized Representative Title Name Signature	Title : Name :	Signature
Person in Charge		
	TEL	
	FAX	
	E-mail	

Remark: Please give the official title of the authorized representative as higher than general manager.