

Packaging Materials, Essential Requirements

Restricted Heavy Metals and Other Substances of Very High Concern (SVHC's)

Packaging Material Data Collection and Reporting

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For convenience, new additions in this edition (EC L80800G) are colored blue.

Summary of Key Changes (EC L80800B):

- Added 11 new REACH Substances of Very High Concern (SVHC) candidates as well as add some additional CAS numbers to the entries for Anthracene and Hexabromocyclododecane (HBCDD). Refer to Section 2.0(h) and Table 1 on page 6 for full details.
- Removed a substance that was previously on the REACH SVHC candidate list but has since been removed by ECHA (European Chemical Agency). Removed from the list was Cyclododecane (CAS No. 294-62-2).
- Moved the restrictions on halogenated flame retardants into a separate entry to avoid confusion regarding heavy metals restrictions. There are firm legal restrictions on heavy metals in packaging per EU Directive 94/62/EC (ref. Section 2.0(a)) but not presently for flame retardants (refer to section 2.0 (b)). However, since these are substances of concern, we do not want them to appear in packaging regardless.
- Added new restrictions regarding desiccants (refer to section 2.0(g) on page 5)
- Modified responsibility statements as it relates to IBM Procurement (refer to section 4.0 on page 8)

Summary of Key Changes (EC L80800E):

- Added** 3 new REACH Substances of Very High Concern (SVHC) candidates that have a possible connection to packaging materials. Refer to Section 2.0(h) and Table 1 on page 6 for full details.
- Deleted** 3 REACH SVHC's which have no known connection with packaging. These included
 - 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene) CAS Number: 81-15-2
 - Aluminosilicate, Refractory Ceramic Fibers, CLP Index No: 650-017-00-8
 - Coal tar pitch, high temperature, CAS Number: 65996-93-2
- Add California Toxics in Packaging regulation to the references and to section 2.0(a)ii..

Summary of Key Changes (EC L80800G): See pages 5 through 8

- Added** 8 new REACH substances of very high concern (SVHC) candidates.
- Tagged 8 SVHC's as PROHIBITED since they are now on the REACH Authorization list.
- Added requirements for California Rigid Plastic Packaging Container (RPPC) Law
- Added statement regarding responsible sourcing of wood and paper based packaging materials.
- Added restrictions regarding wood preservatives including creosote, mercury and arsenic compounds.

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1.0 Introduction

1.1 Abstract

This specification establishes requirements on packaging materials (including reporting) for IBM products, parts and assemblies including those supplied by OEM/CM suppliers. It is largely based on European Union Directive 94/62/EC (Article 11) also described as “the essential requirements” and specifically CEN Technical Report 13695-2 (2004) which addresses heavy metals content in packaging materials. Where appropriate, IBM will establish additional requirements consistent with its environmental objectives and policies.

In addition, it includes the reporting requirements for substances of very high concern (SVHC’s) candidates as they are referred to in the REACH Regulation in the European Union. Articles, including packaging, that contain >0.1% by weight of an SVHC candidate are subject to communication requirements and may be subject to notification requirements under REACH.

What is REACH? - a European regulation on the Registration, Evaluation, Authorization and Restrictions of Chemicals. In effect since 1st June 2007. The goal is the harmonization of the legislation on chemicals throughout the EU. Does not only apply to chemicals, but also to substances in preparations and in articles.

Important: This specification and related requirements must NOT be confused with Restrictions on Hazardous Substances (RoHS) for electronic products. These are separate and distinct directives with unique requirements. However, this specification requires compliance with the relevant packaging aspects of the China RoHS regulation which combines packaging and product requirements and the REACH Regulation.

1.2 Purpose

This engineering specification (ES 5897660):

1. Identifies the elements and compounds that are restricted **in packaging materials**, and stipulates their maximum **cumulative** concentration levels.
2. Details the reporting obligations for compliance with the legal requirements (for example, information regarding participation in consortia and available collection and recycling systems to fund take back and recycling schemes, and other similar requirements)..

Compliance with the requirements herein will be enforced as a condition of purchase per IBM purchase contracts, Statements of Work (SOWs) and/or Standard Goods Agreements either for the supply of parts or sub components or for the purchase of packaging materials for the shipment and distribution of IBM products and integrated solutions. When the requirements of this specification conflict with applicable governmental regulations or legislation, the more stringent requirements shall take precedence.

1.3 Scope and Objectives

1. This IBM Engineering specification (ES 5897660) applies to all packaging materials used in protecting, handling, or marketing of IBM products, parts and supplies including those manufactured by an Original Equipment Manufacturer (OEM), or Contract Manufacturer (CM) even if not specifically referenced in other detailed packaging specifications.

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2. It is important to note that IBM separately maintains environmental and / or related requirements for materials and parts for use in IBM products in other specifications, contracts or procurement documents. Those items are not within the scope of ES 5897660.
3. This specification (ES 5897660) establishes baseline environmental requirements for all packaging materials. ES 5897660 implements IBM's environmental policy objectives and contains some, but not all, major legal requirements for packaging materials. Compliance with the requirements in ES 5897660 alone may not satisfy the supplier's responsibilities to IBM since ES 5897660 does not encompass all legal environmental requirements in various countries around the world for packaging materials. In general, ES 5897660 contains restrictions on certain substances and chemicals in packaging. If a packaging component or sub component is not specifically listed here, but serves the purpose of packaging for protection of a part or product, then it should be considered within scope unless clearly defined in government legislation or related directives to be out of scope.

Packaging Components

- Banding / Strapping
- Chipboard
- Corrugated Fibreboard
- Dunnage and Wrapping Materials
- Foam Cushioning
- Film / Foil
- Paper / Paperboard
- Pallets and Crates of all material constructions (solid wood, plywood, plastic, metal, etc.)

Packaging Sub components

- Coatings
- Glue
- Inks
- Labels
- Adhesive Tape
- Hardware: nails, nuts, bolts, screws, and so on

1.5 Terms and Definitions

OEM / CM	Original Equipment Manufacturer / Contract Manufacturer. Companies that may be involved in building IBM logo products, parts or subassemblies.
Package	A container providing a means of marketing, protecting, or handling a product; including a unit package, an intermediate package, and a transport shipping container as defined in EU Directive 94/62/EC. All the individual items that compose a package are considered packaging components.
Packaging Components	Packaging materials which can be easily separated by hand or by simple mechanical means during the waste management process.
Packaging Sub components	Packaging materials which generally cannot be easily separated by hand or by simple mechanical means. They are considered to be a part of the packaging component to which they are permanently attached.

2.0 Requirements

1. No packaging component or packaging sub component used for IBM parts or products shall contain **lead (Pb), cadmium (Cd), mercury (Hg), hexavalent chromium (Cr6)**, or as part of its final composition in excess of a **sum concentration level of 100ppm (0.01%)** by weight.

*Example: If a packaging component is analyzed and found to have 10ppm of lead, 20ppm of Cadmium, and 80ppm of Hexavalent Chromium then this item would not be compliant since the **sum concentration** is 110ppm (over the 100ppm limit).*

- i) All packaging components and sub components (as defined in section 1.5) must comply with the 100ppm limits individually. That way, no matter how much or how many of them are used, in

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any combination, it would be impossible for the overall concentration to exceed 100ppm in the final package assembly.

ii) Per California's Toxics in Packaging regulation, there shall be **no intentional introduction** of any of the restricted substances (regardless of amount) into packaging components and sub components for the purpose of achieving a specific desired function, performance or appearance. Certifications of this may be required.

2. Do not use **halogenated flame retardants** in packaging materials. Examples include **PBB** (Polybrominated biphenyl), **PBDE** (Polybrominated diphenyl ether), or **TBBPA** (Tetrabromobisphenol A). Refer also to Table 1 on page 6 (REACH SVHC's).

3. **Treatment of Wooden Packaging:**

a. **Fumigation:** Although allowed by International Plant Protection quarantine regulations to combat pest migration, do **not** use **Methyl Bromide (MB)** for fumigation purposes. Exceptions to this policy are allowed only if MB is specifically mandated by law and no other remedy (like Heat Treatment or alternative materials that do not require treatment) is available. However, there is no requirement to measure packaging components or sub components for the presence of MB in their construction.

b. **Prohibited Wood Treatments:** Do not use chemical pressure impregnation (CPI) treatments or any other treatments or preservatives using creosote, mercury compounds or arsenic compounds.

4. **Responsible Sourcing of Wood and Paper based Packaging Materials:** Packaging materials must not contain or be derived from any illegally sourced wood material. Illegally sourced wood material includes but is not limited to wood products made from illegally harvested timber, materials stolen from parks or other protected areas and wood material exported in violation of export bans. All sources of wood and paper based packaging should practice sustainable management principles.

5. Do not use **Polyvinyl Chloride (PVC)** for packaging components and sub components. While PVC is inert, its use in disposable packaging is a concern to many clients and therefore IBM has elected to not use PVC for packaging applications. The most common uses of PVC in packaging are flexible wraps and semi-rigid trays. Exception: PVC may be used for destructible tamper evident labels if equivalent performance cannot be achieved with alternative materials. Such labels are sometimes used for document authenticity and the amount of PVC used in this way is extremely small.

6. Do not use any **fully Halogenated Chlorofluorocarbons (CFC's) or Hydrogenated Chlorofluorocarbons (HCFC's)** in the manufacture of packaging. These substances have been used as expansion agents for plastic foams. CFC's and HCFC's have been prohibited for IBM packaging since 1990 via specification 1041126. That specification (1041126) is now obsolete, and its requirements replaced entirely by this mention herein.

7. **Rigid Plastic Packaging Containers (RPPC's):** All containers meeting the definition of an RPPC must be made from at least 25% post consumer recycled content (PCR) unless otherwise exempted. An RPPC is defined as a container which is capable of holding between 8 fluid oz. (237 cm³) and 5 gal. (18,297 cm³); and is made primarily of plastic (may have cap, lid, label, handle, hinges, and other incidental packaging elements made of non-plastic material and additives such as pigments, colorants, fillers, and stabilizers that are part of the plastic polymer compound); sold holding a product; maintains its shape while holding product; capable of at least one closure (including but not limited to closure occurring during the production or manufacturing process). The container need not be used for liquids or powders to meet the definition of an RPPC. Exemptions include containers designed and qualified for use with hazardous materials. See Appendix C on page 12 for references.

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8. Do not use materials which contain the biocide **Dimethyl Fumarate (DMF)** (CAS Number 624-49-7) in concentrations greater than 0.1mg/kg. This substance is a skin irritant and is now banned in Europe if above the stated threshold. The purpose of DMF is to retard mold growth and therefore is known to be an ingredient in some types of silica gel desiccants or on its own in 100% concentrations.

Whenever desiccants are deemed necessary, use ONLY naturally occurring¹, non-chemically modified² CLAY type desiccants (e.g. Bentonite / Montmorillonite). All other types of desiccants should NOT be used including **Silica Gel, Molecular Sieve, Calcium Chloride** or any other type without prior approval from IBM Packaging Engineering.

Note: if the purpose of using desiccant is solely to prevent corrosion on metallic surfaces, there are non-desiccant solutions for this which can also be considered which may also be more effective. Contact IBM Packaging Engineering for guidance on these alternatives.

¹ **Naturally occurring** means a naturally occurring substance as such, unprocessed or processed only by manual, mechanical or gravitational means, by dissolution in water, by flotation, by extraction with water, by steam distillation or by heating solely to remove water, or which is extracted from air by any means.

² **Non-chemically modified** means a substance whose chemical structure remains unchanged, even if it has undergone a chemical process or treatment, or a physical mineralogical transformation, for instance to remove impurities.

8. **REACH Substances of Very High Concern (SVHC) Candidates:** Packaging components used for IBM that contain more than 0.1% by weight (>1000ppm) of any of the substances of very high concern candidates listed in Table 1 on page 6 are subject to communications requirements, and in some cases to notification requirements under REACH. All packaging components that contain more than 0.1% by weight of any of these substances must be reported to IBM procurement. The report should include a list of the IBM part numbers affected, the name and CAS number of the SVHC candidate and % by weight used within the article (packaging component). Refer to Appendix B for reporting process details.

Important: It is IBM's intention to avoid the use of SVHC candidates entirely for packaging applications or at least avoid them in concentrations above 0.1% (>1000ppm). However, they are not expressly prohibited at this time until we learn more about viable substitutes (if necessary) and the effect this will have on material availability, cost and performance. SVHC's which are placed on the REACH Authorization list are strictly prohibited in concentrations above 0.1% w/w.

Table 1: REACH Substances of Very High Concern (SVHC's) Candidates with possible packaging implications. New entries in BLUE. **Red Text** = PROHIBITED in concentrations above 0.1% w/w. All (entire table) are REPORTABLES if >0.1% w/w concentration in the article., use of these in packaging materials is strongly discouraged.
http://echa.europa.eu/consultations/authorisation/svhc/svhc_cons_en.asp
http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp

Description / Name	CAS Number	Potential Uses in Packaging (1)
Anthracene: in all forms or derivatives (oils, pastes, etc.)	120-12-7, 90640-80-5, 91995-17-4, 91995-15-2, 90640-82-7, 90640-81-6	Red dyes and wood preservatives, carbon black, sealing and corrosion protection
4,4'- Diaminodiphenylmethane	101-77-9	The creation of Polyurethane foam, hardeners for epoxy resins, adhesives.
Dibutyl phthalate (DBP)	84-74-2	Plasticizers, paper coatings, inks, resins and adhesives
Diarsenic pentoxide	1303-28-2	Wood preservatives
Diarsenic trioxide	1327-53-3	Wood preservatives
Sodium dichromate, dihydrate	7789-12-0	Metal finishing / plating, pigments in

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Table 1: REACH Substances of Very High Concern (SVHC's) Candidates with possible packaging implications. New entries in BLUE. **Red Text** = *PROHIBITED in concentrations above 0.1% w/w.* All (entire table) are *REPORTABLES* if >0.1% w/w concentration in the article., use of these in packaging materials is strongly discouraged.
http://echa.europa.eu/consultations/authorisation/svhc/svhc_cons_en.asp
http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp

Description / Name	CAS Number	Potential Uses in Packaging (1)
		paints/plastics.
Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7	Plasticizers, paper coatings, inks, resins, and adhesives
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified	25637-99-4, 25637-99-4, 3194-55-6 134237-50-1, 134237-51-7, 134237-52-8	Flame retardant in PS and PU foam
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	Plasticizers, rubber
Bis(tributyltin)oxide (TBTO)	56-35-9	antifungal agents, pigments, foaming agents, paints
Lead hydrogen arsenate	7784-40-9	Biocide for wood
Triethyl arsenate	15606-95-8	Biocide for wood
Benzyl butyl phthalate (BBP)	85-68-7	Plasticizers, inks, adhesives
2,4-Dinitrotoluene	121-14-2	Plasticizers, dyes
Acrylamide	79-06-1	Paper making
Diisobutyl phthalate (DIBP)	84-69-5	PVC, paints, printing inks, adhesives
Lead chromate	7758-97-6	To make bright yellow or red pigments
Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	To make bright red pigments (paints or inks)
Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	To make bright yellow pigments (paints or inks)
Tris (2-chloroethyl) phosphate (TCEP)	115-96-8	Flame retardants in plastics, including polyurethanes and polyesters
Arsenic acid and its salts (2)	CLP Index # 033-005-001	Biocides and wood preservatives
Boric Acid	0043-35-3, 234-343-4	Biocides and wood preservatives
Disodium tetraborate, anhydrous	1330-43-4, 12179-04-3	Wood glues and other adhesives used in corrugated fibreboard
Tetraboron disodium heptaoxide, hydrate	12267-73-1	Adhesives for corrugate, biocides ,for wood
Cobalt dichloride and all its mutagens and hydrates (see non-comprehensive listing at right)	Anhydrous: 7646-79-9 Hydrates: 69098-14-2, 18201-52-0, 16544-92-6, 65374-82-5, 16890-89-4, 20579-56-0, 7791-13-1, 146998-10-9, 72861-19-9	humidity indicator cards, indicating desiccants Invisible ink, electroplating agents, paints, absorbent, lubricant, corrosion inhibitor.
1,2,3 Trichloropropane	96-18-4	None known
1,2-Benzenedicarboxylic acid, di-C6-8 branched alkyl esters, c7 rich (DIHP)	71888-89-6	Plasticizer in PVC, sealants and printing inks
1,2-Benzenedicarboxylic acid, di-C7-11 branched and linear alkylesters (DHNUP)	68515-42-4	Plasticizer in PVC and foam including urethane
1-methyl-2-pyrrolidone (NMP)	872-50-4	Coatings, industrial degreasing or mold release agents

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http://echa.europa.eu/consultations/authorisation/svhc/svhc_cons_en.asp
http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp

Description / Name	CAS Number	Potential Uses in Packaging (1)
2-Ethoxyethyl acetate	111-15-9	Solvent in paints, rubber, plastics, glues, textiles
Hydrazine	7803-57-8, 302-01-2	Blowing agents, paints, inks, dyes, etc. Monomer for polyurethane, coatings and adhesives.
Strontium Chromate	7789-06-2	Yellow Rust inhibitor

(1) if other uses in **packaging** become evident, please advise so that this listing can be improved.
(2) No longer in the SVHC list but is listed in the registry of intent by ECHA for further examination.

3.0 Supplier Responsibility

This specification is applicable to suppliers of packaging materials to IBM, their suppliers, and vendors performing work for IBM.

Suppliers of packaging materials, who are distributors and not manufacturers, shall ensure that their source manufacturers are in compliance with this specification.

Suppliers of packaging materials, who are manufacturers, shall ensure that their source manufacturers and materials suppliers are in compliance with this specification. Suppliers of packaging materials, must provide IBM with certification documentation ensuring compliance with this specification.

OEM suppliers who manufacture, distribute or re-market IBM logo products, parts or supplies must provide IBM with certification documentation ensuring compliance with this specification.

IBM will request compliance certifications and test data from its first tier packaging suppliers. A web based tool (ESI Packaging) has been established for this purpose and will be communicated separately. Refer to Appendices A and B for compliance reporting process requirements.

Those suppliers in turn will need to request certifications and data from their suppliers and so on as many tiers as necessary to get to the first source manufacturer of the packaging material (see Appendix A).

The certification process itself is subject to change based on industry norm or convention. For instance, if standardized methods for compliance certification are adopted universally, then this method shall be adopted herein as part of this specification.

Blanket packaging commodity certifications are allowed as per the description that follows. For instance, Supplier A makes only corrugated fibreboard materials. They have tested their process and determined that all of their corrugated materials meet the requirements of this specification. They may submit a blanket certification covering all corrugated fibreboard materials purchased by IBM or its OEM/CM partners on our behalf. A separate certification for each carton part number is not required. This is a practical approach considering that there are far fewer packaging commodities than there are individual packaging components. Conversely, if the testing demonstrates that the material is NOT compliant, then we will need to know all IBM part numbers that are affected by the non-compliant material.

At the Government and Client level, they may want to know that the packaging of a specific product they are purchasing from IBM is in compliance. Therefore, extrapolation from packaging commodity compliance to a product's package compliance is presumed when every individual packaging commodity is certified by the Supplier(s) to be in compliance.

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As specified in IBM Procurement Agreements, Statements of Work (SOWs) and Standard Goods Agreements, Suppliers are obligated to provide packaging material types and amounts. For example, corrugated paper, EPS [expanded polystyrene], wood, and so on used in their package assemblies for each product contained in any IBM Customer Solution put on the market or shipped directly to a Customer. Details on how this data can be provided can be found on the following web site link:

<http://www-03.ibm.com/procurement/proweb.nsf/ContentDocsByTitle/United+States-Information+for+suppliers#packaging>

Suppliers should contact IBM Purchasing at the appropriate manufacturing or distribution location with any questions concerning this specification

4.0 IBM Responsibility

1. The appropriate Procurement and/or Engineering organizations having purchasing or design responsibility (respectively) for IBM, OEM, CM built products, supplies, and packaging materials will establish audit processes (with support of IBM Corporate Environmental Affairs, Corporate Packaging and IBM Corporate Audit if necessary) to ensure and track compliance with this specification.
2. IBM Production: This responsibility includes the packaging for IBM produced products or shipments from IBM plants in packaging designed and procured directly by IBM. The IBM buyer responsible for the direct purchase of packaging materials will ensure that their suppliers are registered on ESI Packaging (see Appendix B) and are fulfilling their obligations to provide the necessary data and certifications of compliance in a form that allows IBM to meet its legal and reporting obligations.
3. OEM / CM Procurement: This responsibility includes the packaging for OEM / CM products, parts and supplies. The IBM buyer responsible for the OEM / CM relationship must ensure that their suppliers are fulfilling their obligations to provide the necessary data and certifications of compliance in a form that allows IBM to meet its legal and reporting obligations.
4. Services and Solutions (IGS) Procurement: When IBM procures products by another manufacturer to bundle with IBM Logo products for sale to a client, IBM may then be considered liable for compliance of the entire sales offering including the non-IBM logo items. The IBM buyer responsible for bringing these non-IBM logo products into the solution must ensure that their suppliers are fulfilling their obligations to provide the necessary data and certifications of compliance in a form that allows IBM to meet its legal and reporting obligations.

Refer to Appendix A for an illustrated example

Example 1: IBM sells a complete IT solution to a client which involves IBM servers as well as third party (non-IBM Logo) printers, computers, and software. Technically, since IBM brought the solution to market, IBM is considered to be responsible with regard to EU Directive 94/62/EC compliance for the entirety including the third party products. In this case, Services (IGS) PROCUREMENT is responsible for obtaining a certification from the supplier(s) for their respective pieces of equipment, for instance, a Lexmark printer or Lenovo Think Pad.

Example 2: Several tiers down the supply chain of a packaging commodity a wood crate with permanent metal fasteners are audited for compliance purposes. As those fasteners cannot be removed by hand or by simple mechanical means they are considered part of the package, e.g. crate. In this case, some calculations would be required to determine the relative weight of the fasteners compared to the wood in order to determine compliance status.

- *Outcome 1: Calculations determine that the overall crate is below 100ppm even though the permanent fasteners were found to be above 100ppm individually. As a consequence, the crate would be deemed legally compliant according to EU Directive 94/62/EC; however, a mitigation plan to bring the permanent fasteners into compliance with the 100ppm limit would*

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be required to meet IBM requirements for individual packaging sub components (per Section 2.a).

- *Outcome 2: Calculations determined that the crate would exceed the 100ppm limit for heavy metals. In this case, the entire crate would NOT be eligible for shipment and alternative packaging would have to be put into place immediately.*

See Figure in Appendix A for explanation of the general approach. Scope is not limited only to those commodities illustrated; it applies to any packaging material or packaging supply organizational structure.

Important: At this time there is no officially sanctioned or standardized certification forms or specific testing methods established for compliance with the EU 94/62/EC Directive.

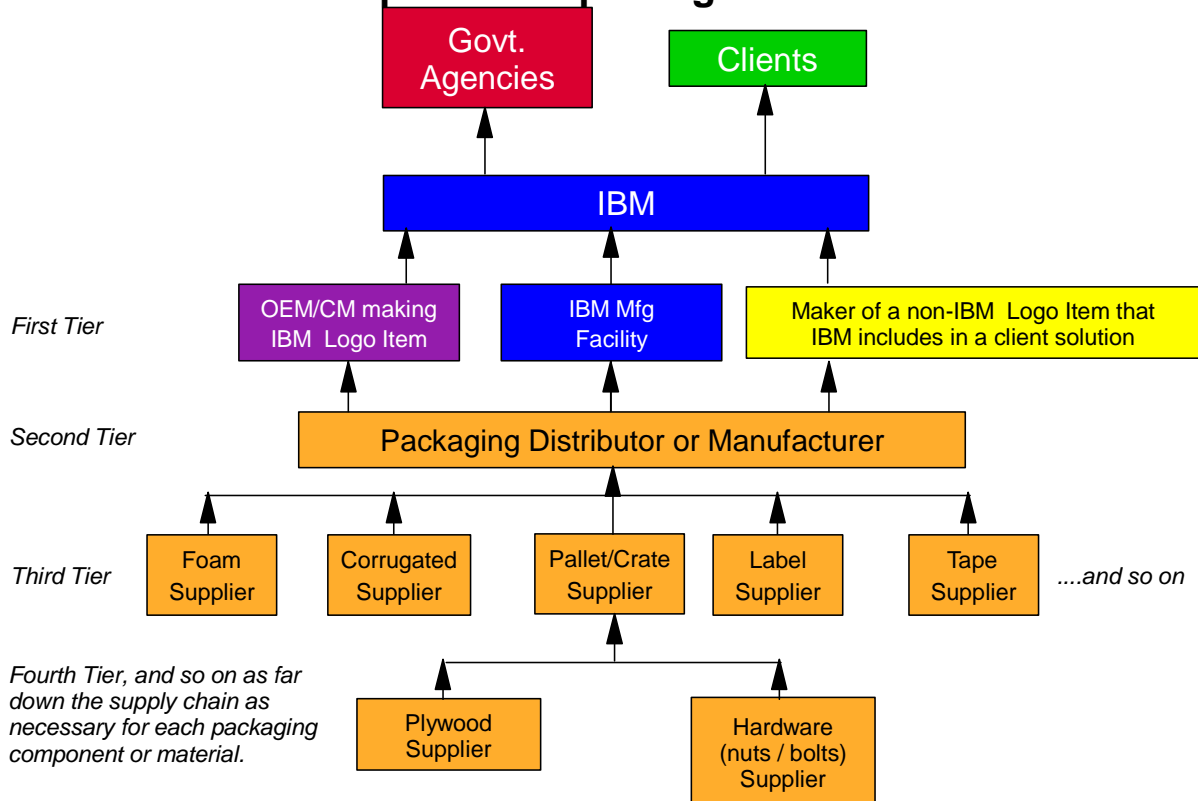
Therefore, it is simply necessary to perform the testing using generally accepted industry methods and document the way it was conducted and the results. Furthermore, those documented results must be available upon request in the event of an audit. IBM will require proactive affirmation of compliance status, to be re-certified on an annual basis, and the scope by which that certification applies (type of material, where used, and so on). See Appendix B for compliance reporting process requirements.

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Appendix A: Compliance Reporting Structure

Packaging Essential Requirements Heavy Metals, SVHC Candidates and other restricted or reportable substances Compliance Reporting Structure



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Appendix B: Packaging Environmental Compliance Reporting Process

IBM uses the web based Electronics Supplier Interlock (ESI) system for obtaining packaging content and related environmental compliance data from suppliers. The following steps are required to complete the process.

ESI Packaging – Registration Process

In order to access the ESI Packaging web site, suppliers must first establish a user ID and Password via the IBM Registration process through the Global Procurement Supply Portal. Suppliers will not be able to access this web site without an ID and password.

Step 1. Tutorial (optional but recommended)

A presentation available at the following web site will help guide users through the web based process for acquiring a user ID and password for the purpose of getting registered on ESI Packaging. This is in the same web location that this specification resides.

<http://www.ibm.com/procurement/proweb.nsf/ContentDocsByTitle/United+States-Information+for+suppliers#packaging>

Step 2. Obtaining a User ID and Password

Before supplier representatives can enroll as a user of ESI Packaging, first go to the IBM Registration site and obtain a user identification and password. Enter the Supply Portal web site at:

<Http://www.ibm.com/procurement/esi>

Step 3. Requesting Access to ESI Packaging

After acquiring a user ID and password, reenter the Supply Portal web site at the following web site and follow the instructions shown in the tutorial file or as guided within ESI:

<http://www.ibm.com/procurement/esi>

Step 4. Enter all required packaging and compliance data.

Select the appropriate form from the navigator list on the left side of your screen (Environmental Compliance, Pkg. Product Information, etc.) Enter packaging content data and respond to the compliance certification survey. This serves as our paper trail to ensure compliance with this specification and therefore all applicable laws and regulations affecting packaging referenced in this specification.

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Appendix C: References and Related Documents

Document	Description
EU Directive 94/62/EC (1994), Article 11	European Parliament and Council Directive on Packaging and Packaging Waste
EU Directive 2004/12/EC	Addendum to EU Directive 94/62/EC
GA21-9261-x (latest level) PN 31L5345 (1)	Packaging and Handling, Supplier and Interplant Requirements (IBM's General Packaging Requirements)
EPEAT Criteria	Electronic Products Environmental Assessment Tool
REACH Regulation EC/1907/2006	Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
IBM Specification 37L8024 (1)	Wooden Packaging -- Materials Selection, Treatment and Marking Requirements
IBM Specification 1041126 (1)	Expanded Packaging Materials -- Prohibited Expansion Agents (now obsolete)
California Health and Safety Code 25214.11-25214.26	Also known as "The California Toxics in Packaging Prevention Act" Http://www.dtsc.ca.gov/ToxicsInPackaging/index.cfm
California Rigid Plastic Packaging Container Law	Http://www.calrecycle.ca.gov/Plastics/RPPC/ and http://www.cawrecycles.org/issues/rppc
EU Commission Decision 2009/251/EC (moved from section 2.0)	Regarding Dimethyl Fumarate (DMF) Http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:074:0032:0034:EN:PDF
(1) These specifications can be accessed from the following web page: Http://www-03.ibm.com/procurement/proweb.nsf/ContentDocsByTitle/United+States~Information+for+suppliers#packaging	

End of Document

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