

Kodak Health, Safety, and Environmental (HSE) Specifications for Products, Parts and Packaging

Table of Contents

1.0	Purpose	2
2.0	Scope	2
3.0	Supplier Responsibilities	3
4.0	Definitions	5
5.0	Electrical and Electronic Equipment (EEE) Requirements	7
6.0	Article Requirements	11
7.0	Chemical Requirements	14
8.0	Packaging Requirements	17
9.0	Appendices	20
App	pendix A – Electrical and Electronic Equipment: Restricted Materials	20
App	pendix B – Articles: Restricted Materials	21
App	pendix C – Chemicals: Restricted Materials	22
App	pendix D – Packaging: Restricted Materials	23
App	pendix E — Expanded chemical lists with Chemical Abstract Services (CAS) number	24
App	pendix F – Safety Traceability Requirements for Critical Components	34
Арр	pendix G – Packaging References	35
Арр	pendix H – Instructions for Testing and Sampling Heavy Metals in Packaging	36
App	pendix I – Revision History	37

1. Purpose

Eastman Kodak Company (Kodak) expects that products supplied to Kodak will meet all applicable legal requirements during manufacture, distribution, and sale. Supplier products must also meet additional Kodak requirements that go beyond compliance in order to reduce the environmental impact of Kodak products.

The purpose of *EKSP-2285*, *Kodak Health*, *Safety*, *and Environmental (HSE) Specifications for Products*, *Parts and Packaging* is to communicate Kodak product requirements to Suppliers. This document is revised periodically. Suppliers are expected to meet the most current Kodak specification, which can always be found at www.kodak.com/go/hsesupplier, or more recent legal requirements which may not yet be reflected in the Kodak specification. Product Requirements Documents (PRD), engineering drawings or other documents may also be used to communicate specific requirement details applicable to the items provided to Kodak.

Additional guidance on Kodak's expectations for Suppliers is provided in the Health, Safety, and Environmental (HSE) Supplier Performance Standard, which can be found at: www.kodak.com/go/hsesupplier.

2. Scope

EKSP-2285 applies to all products supplied to Kodak and the materials used to manufacture these products, regardless of production location. Requirements apply to KODAK and non-KODAK branded products and are based on the type of product. **EKSP-2285** specifies HSE requirements for the following types of products:

- Electrical and Electronic Equipment products
- Articles
- Chemical products
- Packaging

3. Supplier Responsibilities

3.1. Manufacturing Requirements:

- **3.1.1.** Manufacturing/Export approvals: The Supplier must obtain and maintain any necessary approvals and authorizations from regulatory agencies and other government organizations to manufacture in and export from their country of manufacture.
- **3.1.2.** Ozone Depleting Substances: Suppliers must not use any ozone depleting substances (as identified in Appendix E) to manufacture products supplied to Kodak.

3.2. Conflict Minerals Requirements:

Suppliers must have a Due Diligence management system to determine the sources of all Conflict Minerals (see Section 4.0 Definitions) in all products supplied to Kodak that were in the supply chain on or after January 31, 2013. This management system must also reasonably assure that Conflict Minerals do not directly or indirectly finance or benefit armed groups that are perpetrators of serious human rights abuses in the Democratic Republic of the Congo or an adjoining country. Participants shall exercise due diligence on the source and chain of custody of these minerals and make their due diligence measures available to Kodak upon request. When requested by Kodak, Suppliers must complete and return a Conflict Minerals questionnaire. The request from Kodak for Conflict Minerals information may be made through an authorized third-party.

3.3. Conformance Documentation:

The Supplier is to complete either Kodak's HSE Supplier Declaration Form (DF) or respond to authorized third-party requests for conformance information for all Supplier sites that supply products to Kodak.

A DF can be obtained at Kodak's website: www.kodak.com/go/hsesupplier. If Kodak makes a direct request for a DF, the Supplier must respond within 10 business days.

The supplier must provide additional compliance documentation regarding products and packaging materials to satisfy Kodak's regulatory reporting requirements.

3.4. Expectation Regarding Second and Third Tier Suppliers:

The Supplier must have a due diligence process for contacting their suppliers to ensure accurate and complete information is provided to Kodak. Documentation and/or test data, including documentation and data from the Supplier's supply chain, must be kept on file and made available upon request by Kodak.

3.5. Change Management:

The Supplier must notify Kodak, by sending an email to their Kodak Procurement contact and ww-mcd@kodak.com, whenever product, process, material or regulatory changes result in changes to the **DF** that has been previously submitted.

Suppliers of equipment products and components for which Kodak uses an authorized third-party to gather conformance information must respond to requests on an ongoing basis, as restricted and reportable substance lists are updated by authorities multiple times per year.

3.6. <u>Product Changes, Discontinuance, Recalls or Non-Conformance</u>:

The Supplier is obligated to communicate in writing to Kodak at ww-mcd@kodak.com any changes, discontinuance, recalls, or non-conformance that could impact the safety, health or environmental performance of a Kodak product.

If potential safety, health, environmental or regulatory issues are discovered by Kodak or Kodak's customers, which are determined to be the Supplier's responsibility, the Supplier will be notified in writing. The Supplier must address the concern in writing within 10 business days to all such notifications. For Contract Manufacturers, this includes taking immediate steps to address the issue for any work-in-process.

3.7. Additional Information:

Upon request, Suppliers must provide documentation and/or test data to Kodak in order to verify additional requirements that will be identified in the Product Requirements Document (PRD) or other similar documents. This includes, but is not limited to:

- special applications, material composition or marking (e.g., food contact applications)
- regional product labeling

4. Definitions

Articles – Item/object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition and which have an end-use function in whole or in part dependent on their shape or design but does not require alternating or direct electric current to operate. Examples of Articles include aluminum printing plates, film, paper, film or paper base, printed materials, and compact discs. **Note:** Batteries and components used to manufacture EEE shall be assessed and declared per the requirements for EEE specified in this document (see definition).

Chemicals – Products or raw materials made of organic or inorganic substances with a distinct molecular composition, which can be a solid, liquid or gas. Chemicals may be individual chemicals or mixtures. Chemicals are typically consumed during use. Examples of chemical products include toners, inks, plate processing chemistry, photo processing chemicals and alcohol cleaning wipes. Examples of raw materials include solvents, polymers and chemical raw materials.

Conflict Minerals – Conflict minerals (currently tantalum, tin, tungsten, gold, and their derivatives) as defined by US Securities and Exchange Commission Form SD and Regulation (EU) 2017/821.

Electrical and Electronic Equipment (EEE) – All equipment that has at least one intended function which is dependent on electric current or electromagnetic fields, or that generates or transfers or measures such currents and fields. Finished EEE include standalone printers, presses, plate setters, plate processors, scanners, work stations, and external power supplies. <u>EEE</u> also applies to components and parts that are formed to a specific shape or design which are intended to be incorporated into an <u>EEE</u> and may or may not have a power source. This includes, but is not limited to: sensors, hardware components, printed circuit boards, batteries, cables, cords, mechanical and electromechanical sub-assemblies and sub-components used to assemble equipment products and/or systems.

Homogeneous Material – A material that cannot be mechanically disjointed into different materials. The term homogeneous is understood as of uniform composition throughout. Examples of homogeneous materials would be individual types of plastics, ceramics, glass, metals, alloys, paper board, resins and coatings. The term mechanically disjointed means that the materials can be, in principle, separated by mechanical actions such as unscrewing, cutting, crushing, grinding and abrasive processes.

Intentionally added – Deliberate use in the formulation of a product where its continued presence is desired to provide a specific characteristic, appearance or quality.

Known to be present – Supplier has knowledge that the material is present through existing analytical information, second tier supplier declarations or other methods.

Large-scale stationary industrial tool (LSSIT) – EU Directives 2001/65 and 2012/19 broadly define LSSIT and exclude LSSIT from the scope of the "RoHS and WEEE Directives". Kodak as manufacturer and/or importer of products to the EU market reserves the right to decide if the LSSIT exclusion is applicable to items that Kodak purchases.

Nanomaterials - Particles which are considered to be nanomaterials as described by U.S. EPA TSCA (40 CFR 704) and/or meet the definition of nanomaterials according to the EU *Recommendation on the definition of a nanomaterial* (2011/696/EU)

Recommendation on the definition of a nanomaterial (2011/696/EU)

A natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50 % or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm - 100 nm. In specific cases and where warranted by concerns for the environment, health, safety or competitiveness the number size distribution threshold of 50 % may be replaced by a threshold between 1 and 50 %.

By derogation from the above, fullerenes, graphene flakes and single wall carbon nanotubes with one or more external dimensions below 1 nm should be considered as nanomaterials. http://ec.europa.eu/environment/chemicals/nanotech/faq/definition_en.htm

TSCA Reporting and Recordkeeping Requirements

This rule applies to chemical substances, as defined in section 3 of TSCA, that are solids at 25 °C and standard atmospheric pressure; that are manufactured or processed in a form where any particles, including aggregates and agglomerates, are in the size range of 1-100 nanometers (nm) in at least one dimension; and that are manufactured or processed to exhibit one or more unique and novel properties. This rule does not apply to chemical substances manufactured or processed in forms that contain less than 1% by weight of any particles, including aggregates and agglomerates, in the size range of 1-100 nm. These parameters are for purposes of identifying chemical substances that are subject to the rule and do not establish a definition of nanoscale material.

https://www.regulations.gov/document?D=EPA-HQ-OPPT-2010-0572-0137

Packaging – Any material intended to be used for the containment, protection, handling, delivery and presentation of goods from raw materials to processed goods from the producer to the user or consumer. Packaging may be classified as primary packaging, grouped or secondary packaging, and transport or tertiary packaging. Examples of packaging include: cartons, crates, pails, trays, bags, pallets, pallet collars, drums, load boards, skids, dunnage, interior or exterior blocking, bracing, cushioning, weatherproofing, exterior strapping, stretch wrapping, coatings, closures, inks, adhesives, interleaving paper and labels.

Recycled Content – The concentration of materials that have been recovered or otherwise diverted from the solid waste stream, either during the manufacturing process (pre-consumer) or after the consumer use (post-consumer) and have been reused in the production of another product.

Reportable Application – Specific purpose of use that triggers the reporting requirement. Note: This use is defined in the scope of the underlying law or industry standard. Examples include batteries, textiles, wood, etc.

Rigid Plastic Packaging Container (RPPC) – Any plastic package having a relatively inflexible finite shape or form that has a minimum capacity of eight fluid ounces (236.6 milliliters), or the equivalent volume, and a maximum capacity of five fluid gallons (18.9 liters), or the equivalent volume, and is capable of maintaining its shape while holding other products. RPPCs include, but are not limited to: bottles, cartons, pails, clamshells and other receptacles.

Threshold Level – Concentration level which defines the limit above which the presence of a substance in a product shall be declared. (back to top)

5. Electrical and Electronic Equipment (EEE) Requirements

The Supplier must evaluate **EEE** to ensure the following HSE Product Specifications are met.

- Restricted Materials
- EU REACH Substances of Very High Concern (SVHCs)
- Safety Traceability Requirements for Critical Components
- Batteries
- Finished EEE Requirements
- EEE Containing Chemicals
- Packaging

5.1. Restricted Materials:

Appendix A provides the web address to the International Electrotechnical Commission IEC 62474 – Material Declaration for Products of and for the Electrotechnical Industry *Declarable substance groups and declarable substances*. This list includes restricted materials, reportable applications and threshold levels.

Reference substances (also part of IEC 62474, at the same web address) contains an expanded listing of these materials, which includes available Chemical Abstract Services (CAS) numbers.

Unless Kodak has confirmed acceptability for use and provided written permission to a Supplier, Products must not contain restricted materials above the prescribed thresholds for the reportable applications listed in <u>Appendix A</u>.

Products must not contain material concentrations in excess of the prescribed thresholds of the European Union (EU) Directive 2011/65/EU regarding the Restriction of Hazardous Substances (RoHS), including Commission Delegated Directive (EU) 2015/863 (CDD 2015/863) restricting the use of certain phthalates. It is acceptable for a Supplier to use a restricted material at a concentration greater than a prescribed EU RoHS threshold if:

- the Supplier provides a written declaration indicating the currently applicable 2011/65/EU exemption that allows the use and Kodak provides written permission to the supplier confirming acceptance of the use for the given application, or
- Kodak provides written permission to the supplier confirming acceptance of the use for the given application (for example – for use in a Kodak product that is out-ofscope of 2011/65/EU as a Large-Scale Stationary Industrial Tool (LSSIT)).

5.2. EU REACH Substances of Very High Concern (SVHCs):

Suppliers are required to declare all SVHCs present at greater than 0.1% by weight in constituent articles of:

- Electrical and Electronic Equipment
- Packaging
- Components and sub-components (i.e. constituent articles) of electrical and electronic equipment

SVHCs are identified on the "Candidate List" in Annex XIV of the European Chemical Agency Article 59(1) of the Regulation (EC) No. 1907/2006 (European Union REACH). SVHCs are found at:

http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en_asp on the European Chemical Agency website.

Suppliers must also review updates to the list of SVHCs, and inform Kodak at ww-MCD@kodak.com if a newly added material is present in the items provided to Kodak at greater than 0.1% by weight.

Suppliers of equipment products and components for which Kodak uses an authorized third-party to gather conformance information must respond to requests on an ongoing basis as the EU REACH SVHC list is updated.

5.3. TSCA section 6(h) – Persistent, Bioaccumulative and Toxic (PBT) Chemicals:

Suppliers are required to declare PBTs present at greater than 0.1% by weight in constituent articles of:

- Electrical and Electronic Equipment
- Packaging
- Components and sub-components (i.e. constituent articles) of electrical and electronic equipment

The TSCA PBTs are found at: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/persistent-bioaccumulative-and-toxic-pbt-chemicals-under-on-the-Environmental Protection agency website.

5.4. Safety Traceability Requirements for Critical Components:

Suppliers providing plastics, foam, wire harnesses, circuit boards and safety labels, used to manufacture a product that will be certified by an independent product safety certification organization (e.g. UL, TUV, Intertek), must meet the minimum safety traceability requirements. Appendix F identifies these requirements. Meeting these requirements will demonstrate to regulatory inspectors that the material and/or part is identical or equivalent to what is listed in the agency's product safety inspection report.

5.5. Batteries:

Suppliers must supply the following battery information including, but not limited to:

- the number and weight of embedded or non-embedded batteries shipped with the product
- battery chemistry
- IEC and ANSI Designations (e.g., R03 and 24)
- form factor (shape)
- voltage
- whether primary (non-rechargeable) or secondary (rechargeable)
- transportation classification
- Safety Data Sheet
- test reports and/or certifications (e.g., UN Safety Test Certificate, Korea Product Safety Testing Certificate)

5.6. Finished Commercial Electrical and Electronic Equipment (EEE) Requirements:

Finished EEE includes, but is not limit to, standalone printers, presses, plate setters, plate processors, scanners, work stations and external power supplies. Product Requirements Documents (PRD) or other documents may be used to communicate the intended countries of sale so that applicable regulatory requirements, marks or statements are placed on the product and/or data plate and legally required compliance documentation is delivered with the equipment, for example serialized EU CE Declaration of Conformity for Machinery Directive equipment.

- 5.6.1. Product Safety (PS): Products shall comply with applicable IEC Safety standards when there are no country specific regulatory requirements. Products must also conform to all applicable Product Safety (PS) appropriate standards and workplace safety requirements for intended markets (e.g., UL, CSA, IEC, ASTM standards and EU Product Safety Directives). To ensure applicable PS standards are met, Suppliers must disclose to Kodak if wireless or laser technology is used. Certificates, test reports and supporting documentation must be provided for all countries in which the Supplier has approval to market.
 - Manuals or guides shall be provided which identify appropriate preventative and protective measures to be employed to mitigate risk to customers and service personnel during installation, use and service.
 - The Product Requirements Document (PRD) for specific products may contain additional requirements. Suppliers are expected to meet all equipment regulatory requirements for the specified markets on which the equipment will be placed.
- **5.6.2.** Electromagnetic Compatibility (EMC): Products shall comply with applicable IEC/CISPR EMC standards when there are no country specific regulatory requirements. Products must also conform to applicable Electromagnetic Compatibility (EMC) standards appropriate for intended markets (e.g., FCC, RCM, IEC standards, and EU EMC Directive). To ensure applicable EMC standards are met, the Supplier must disclose to Kodak if wireless or other ionizing/non-ionizing emitter technology is used. Upon request, certificates, test reports and supporting documentation must be provided for all countries in which the Supplier has approval to market.
 - The Product Requirements Document (PRD) for specific products may contain additional requirements. Suppliers are expected to meet all equipment regulatory requirements for the specified markets on which the equipment will be placed.
- **5.6.3. Sound:** Products must conform to the following sound pressure levels:
 - General office systems must be less than 70 dB(A)
 - Large professional operating systems must be less than 80 dB(A) at workstations where operators will be continuously exposed. Kodak bases exposure levels on a 12-hour work day. At locations where exposure is not continuous, levels may be increased by 5 dB(A) for each halving of the base (12 h) exposure time.

For Information Technology and Telecommunications Equipment, the sound pressure levels are measured according to ISO 7779. For Machinery the sound pressure levels are measured according to basic standards ISO 11201 (sound pressure level) and ISO 3744 (sound power level). Machine-specific noise test codes shall be used when available (e.g. EN 13023 Noise measurement methods for printing, paper converting, paper making machines and auxiliary equipment. Measured noise levels should represent the full system configuration offered for sale. Products that are part of a network application (printers, accessories) are to be tested in the confines of that application. Measurement uncertainty is assumed to be that of an ANSI Type 2 General Purpose Sound Level Meter (+/- 2dB).

5.6.4. Energy Efficiency: Products must conform to all applicable energy efficiency regulations including testing, labeling and registrations applicable to the equipment type and the intended markets.

- **5.6.5.** Emissions from Products: Suppliers must identify airborne emissions that may be generated/emitted during normal conditions of use or foreseeable misuse (e.g., volatile organic compounds, carbon black, ozone, styrene, objectionable odors and dust). Upon request certificates, test reports and supporting documentation must be provided.
- **5.6.6.** Paper and Printed Materials: Paper and printed materials (including manuals and stuffer sheets) must contain a minimum of 10% recycled content OR be certified by one of the following forest certification schemes:
 - Any national certification system that has been endorsed by PEFC (Programme for the Endorsement of Forest Certification), e.g., Sustainable Forestry Initiative (United States) and PEFC Canada.
 - The Forest Stewardship Council.
- 5.6.7. <u>EEE Containing Chemicals</u>: Suppliers are required to meet all applicable Section 7.0 Chemical Requirements for chemical products contained in EEE such as cleaning solutions, coolants, and refrigerants. EEE delivered by Suppliers to Kodak shall not contain Ozone Depleting Substances. For Fluorinated Greenhouse Gasses and Ozone Depleting Substances see Section 7.2.3
- 5.6.8. Additional Labeling Requirements: Suppliers are required to meet additional product labeling regulatory requirements for intended markets identified in the Product Requirements Document (PRD) or regulations, such as refrigerant labeling in the European Union (EU) to meet labeling requirements for equipment that contains certain fluorinated greenhouse gases, per Regulation Commission Implementing Regulation (EU) 2015/2068 of 17 November 2015 establishing, pursuant to Regulation (EU) No 517/2014.

5.7. Packaging:

Suppliers are required to meet all applicable Section 8 Packaging Requirements for packaging components used with EEE supplied to Kodak.

6. Article Requirements

The Supplier must evaluate *Articles* to ensure the following HSE Product Specifications are met.

- Restricted Materials and Categories
- Materials Requiring Declaration
- Chemicals Released from Articles during Foreseeable Use
- Biocides/Biostats/Pesticides
- Paper and Printed Materials
- Product Safety (PS)
- Emissions from Products
- Packaging

6.1. Restricted Materials and Categories:

Appendix B provides the web address to the International Electrotechnical Commission IEC 62474 –Material Declaration for Products of and for the Electrotechnical Industry *Declarable substance groups and declarable substances*. Since articles are often in scope of Electrical and Electronic Equipment applications, Suppliers should identify when a material on this list is intentionally added or known to be present in any article, regardless of the Reportable Applications or Reporting Threshold listed.

The *Reference substances* list (also part of IEC 62474, at the same web address) contains an expanded listing of these materials, which includes available Chemical Abstract Services (CAS) numbers.

<u>Appendix B</u> also identifies specific applications having additional restricted categories of materials and the criteria Suppliers must use to evaluate each component of these specific *Articles*.

Unless Kodak has confirmed acceptability for use and provided written permission to a Supplier, Products must not contain restricted materials above the prescribed thresholds for the reportable applications listed in <u>Appendix B</u>.

6.2. Materials Requiring Declaration:

- **6.2.1. SVHCs:** Suppliers are required to declare all SVHCs present at greater than 0.1% by weight in:
 - Articles
 - Packaging
 - Components and sub-components (i.e. constituent articles) of assembled articles

Suppliers are required to declare SVHCs present at greater than 0.1% by weight. SVHCs are identified on the "Candidate List" per Article 59(1) of the Regulation (EC) No. 1907/2006 (European Union REACH). SVHCs are found at: http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp on the European Chemical Agency website.

Suppliers must also review updates to the list of SVHCs and inform Kodak at ww-MCD@kodak.com if a newly added material is present in the items provided to Kodak at greater than 0.1% by weight.

6.2.2. Proposition 65: Suppliers must declare when labeling is required in the state of California, per the California State Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Suppliers of consumer products must provide Kodak a product that does not require a California Proposition 65 label, unless approved by Kodak. The

Proposition 65 list includes lead, mercury, phthalates, PCBs, and DEHP, and can be found at http://www.oehha.ca.gov/prop65/prop65 list/Newlist.html.

6.2.3. <u>Hazardous Information</u>: Suppliers are required to provide the following information:

- Hazardous materials evaluation identify components listed in 40 CFR 261.24,
 Table 1
- TCLP (Toxicity Characteristic Leaching Procedure) test data for any articles which contain a component from 40 CFR 261.24, Table 1
- **6.2.4.** Nanomaterials: Suppliers are required to declare particles which are considered to be nanomaterials as described by U.S. EPA TSCA (40 CFR 704) and/or meet the definition of nanomaterials according to the EU *Recommendation on the definition of a nanomaterial* (2011/686/EU). For these materials, Suppliers are required to provide size distribution information. Suppliers should also provide Kodak with any available data such as:
 - Specific surface area, shape, density
 - Aggregation or agglomeration tendency
 - Surface modification
 - Physical-chemical properties (e.g., octanol-water partition coefficient, solubility, etc.)
 - Toxicity data

6.3. Chemicals Released from Articles during Foreseeable Use:

Suppliers are required to meet all Section 7.0 Chemical Requirements.

6.4. Biocides/Biostats/Pesticides:

Suppliers are required to identify biocides/biostats/pesticides contained in *Articles* and upon request, provide information and other assistance to Kodak to meet regulatory requirements in countries with biocidal or related requirements. Countries which have established biocide directives include, but are not limited to Canada (PCA), European Union (Biocidal Products Regulation) and US (FIFRA).

6.5. Paper and Printed Materials:

Paper products (including manuals and stuffer sheets) must contain a minimum of 10% recycled content OR be certified by one of the following forest certification schemes:

- Any national certification system that has been endorsed by PEFC (Programme for the Endorsement of Forest Certification) (e.g. Sustainable Forestry Initiative (United States) and PEFC Canada).
- The Forest Stewardship Council.

6.6. Product Safety (PS):

Articles must conform to all applicable Product Safety (PS) standards appropriate for intended markets identified in the Product Requirements Document (PRD) (e.g., Flammability (UL-94), Toy Safety (ASTM F963, EN-71) or Food Contact). Upon request, certificates, test reports and supporting documentation must be provided.

6.7. Emissions from Products:

Suppliers must identify airborne emissions that may be generated/emitted during normal conditions of use or foreseeable misuse (e.g., volatile organic compounds, carbon black, ozone, styrene, objectionable odors and dust). Upon request, certificates, test reports and supporting documentation must be provided.

6.8. Packaging:

Suppliers are required to meet all applicable Section 8 Packaging Requirements for packaging components used Articles supplied to Kodak.

7. Chemical Requirements

The Supplier must evaluate *Chemicals* to ensure the following HSE Product Specifications are met.

- Restricted Materials and Categories
- Materials Requiring Declaration
- Safety Data Sheets (SDS)
- Global Inventory Status
- REACH
- Biocides/Biostats/Pesticides
- Product Safety (PS)
- Emissions from Products
- Paper and Printed Material
- Packaging

7.1. Restricted Materials and Categories:

<u>Appendix C</u> identifies restricted categories of materials and the criteria Suppliers must use to evaluate each component of the *Chemical*, as well as reportable applications and threshold levels.

Appendix E contains an expanded listing of these materials, which includes available Chemical Abstract Services (CAS) numbers.

Unless Kodak has confirmed acceptability for use and provided written permission to a Supplier, Products must not contain restricted materials above the prescribed thresholds for the reportable applications listed in Appendix C.

7.2. Materials Requiring Declaration:

- **7.2.1.** <u>Hazardous Information</u>: Suppliers are required to provide the following information:
 - Identify components listed in 40 CFR 261.33 and provide the weight %
 - Volatile Organic Compounds (VOCs) and provide the weight % of each
 - Presence of mineral oil components (MOH, MOSH, MOAH)
- **7.2.2.** Nanomaterials: Suppliers are required to declare particles intentionally manufactured and which are considered to be nanomaterials as described by U.S. EPA TSCA (40 CFR 704) and/or meet the definition of nanomaterials according to the EU *Recommendation on the definition of a nanomaterial* (2011/686/EU). For these materials, Suppliers are required to provide size distribution information. Suppliers need to provide the following information to Kodak upon request:
 - Specific surface area, shape, density
 - Aggregation or agglomeration tendency
 - Surface modification
 - Physical-chemical properties (e.g., octanol-water partition coefficient, solubility, etc.)
 - Toxicity data

7.2.3. Fluorinated Greenhouse Gases and Ozone Depleting Substances (identified in Appendix E)

Suppliers must confirm no Ozone Depleting Substance is contained in products supplied to Kodak. When no alternative exists, only Fluorinated Greenhouse Gases with low Global Warning Potential should be contained in products delivered by Suppliers to Kodak. Suppliers are required to provide Kodak with the name of

contained Fluorinated Greenhouse Gases, their weights in each concerned product and their Global Warning Potentials.

7.3. Safety Data Sheets (SDS):

Suppliers are required to provide a SDS for chemicals, solutions or mixtures to the Kodak purchasing representative and to HSE at www.msds.com. The SDS must comply with applicable provisions of GHS (Globally Harmonized System of Classification and Labeling of Chemicals), or the comparable regulation for the country where the material is transported. The SDS must be provided in English and in the official languages of all countries to which it is supplied.

7.4. Global Inventory Status:

Suppliers are required to declare the status of *Chemicals* (including those in solutions, mixtures or released from *Articles* during foreseeable use) in regard to chemical registration and premanufacture notification requirements in those countries that have enacted such requirements. Countries having chemical control regulations include, but are not limited to, Australia (AICS), Canada (DSL/NDSL), China (IECSC), European Union (EINECS), Japan (ENCS), Korea (ECL), New Zealand (NZIOC), Philippines (PICCS), Province of Ontario, Switzerland, Taiwan, Turkey and United States (TSCA).

7.5. REACH:

To assist Kodak in meeting requirements under European Union REACH Regulation (EC) No. 1907/2006, Suppliers are required to provide the following information:

- Identify whether the Chemical is manufactured in Europe
- Identify whether Supplier has pre-registered or registered the Chemical
- Identify if the *Chemical* is exempt from reporting (and if so, why) Indicate if Supplier's "Only Representative" will agree to include Kodak volume/use should Kodak have applicable reporting requirements for the *Chemical*. To assist Kodak in meeting REACH-like requirements in other countries such as Korea and Turkey, suppliers are required to provide additional information upon request.

Suppliers are required to declare SVHCs present at greater than 0.1% by weight. SVHCs are identified on the "Candidate List" per Article 59(1) of the Regulation (EC) No. 1907/2006 (European Union REACH). SVHCs are found at: http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.a sp on the European Chemical Agency website.

Suppliers must also review updates to the list of SVHCs and inform Kodak at ww-MCD@kodak.com if a newly added material is present in the items provided to Kodak at greater than 0.1% by weight.

7.6. Biocides/Biostats/Pesticides:

Suppliers are required to identify biocides/biostats/pesticides contained in *Chemicals* and upon request, provide information and other assistance to Kodak to meet regulatory requirements in countries with biocidal or related requirements.

Countries which have established biocide directives include, but are not limited to Canada (PCA), European Union (Biocide Products Regulation) and US (FIFRA).

7.7. Product Safety (PS):

Chemicals must conform to all applicable Product Safety (PS) standards appropriate for intended markets (e.g., Flammability (UL-94), Toy Safety (ASTM F963, EN-71) or Food Contact). Upon request, certificates, test reports and supporting documentation must be provided.

7.8. Emissions from Products:

Suppliers must identify airborne emissions that may be generated/emitted during normal conditions of use or foreseeable misuse (e.g., volatile organic compounds, carbon black, ozone, styrene, objectionable odors and dust). If requested by Kodak, Supplier must provide copies of emissions testing or additional air emissions data.

7.9. Paper and Printed Materials:

Paper and printed materials (including manuals and stuffer sheets) must contain a minimum of 10% recycled content OR be certified by one of the following forest certification schemes:

- Any national certification system that has been endorsed by PEFC (Programme for the Endorsement of Forest Certification), e.g. Sustainable Forestry Initiative (United States) and PEFC Canada.
- The Forest Stewardship Council

7.10. Packaging:

Suppliers are required to meet all applicable Section 8 Packaging Requirements for packaging components used for *Chemicals* supplied to Kodak.

8. Packaging Requirements

The Supplier must evaluate *Packaging* to ensure the following HSE Packaging Specifications are met.

- Environmental Impact
- Restricted Materials
- Substances of Very High Concern (SVHCs)
- Plastic Packaging
- Paper Packaging
- Wood Packaging
- Regional Requirements for Product Packaging

8.1. Environmental Impact:

Packaging materials supplied to Kodak shall be designed and manufactured that:

- Their volume and weight are limited to the minimum adequate to maintain the appropriate and necessary level of safety and hygiene for concerned packed products.
- They are re-usable or easily recyclable, or at least recoverable in the form of energy recovery.
- They contain, as much as possible, recycled materials

8.2. Restricted Materials:

<u>Appendix D</u> identifies restricted materials, reportable application and threshold levels.

Appendix E contains an expanded listing of these materials, which includes available Chemical Abstract Services (CAS) numbers.

Unless Kodak has confirmed acceptability for use and provided written permission to a Supplier, *Packaging* must not contain restricted materials above the prescribed thresholds for the reportable applications listed in <u>Appendix D</u>.

8.3. Materials Requiring Declaration:

Suppliers are required to disclose the presence of mineral oil components in product packaging. (MOH, MOSH, MOAH)

8.4. Substances of Very High Concern (SVHCs):

Suppliers are required to declare SVHCs present at greater than 0.1% by weight. SVHCs are identified on the "Candidate List" per Article 59(1) of the Regulation (EC) No. 1907/2006 (European Union REACH). SVHCs are found at:

http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en_asp on the European Chemical Agency website.

Suppliers must also review updates to the list of SVHCs, and inform Kodak at ww-MCD@kodak.com if a newly added material is present in the items provided to Kodak at greater than 0.1% by weight.

8.5. Plastic Packaging:

Plastic packaging materials must be marked with the appropriate Society of the Plastics Industry Inc. (SPI) resin identification code. Exceptions include metalized films and laminates, shrink wrap, foams and materials that have dimensions or color that make marking impractical.

The use of plastic bags shall be limited to cases where they are essential to maintain the appropriate and necessary level of safety and hygiene for concerned packed products.

PVC should not be used in plastic packaging.

8.6. Paper Packaging:

Paper-based packaging must either be supplied by a Forest Stewardship Council (FSC) certified source (or equivalent) or contain recycled content.

Additionally, elemental chlorine shall not be used to bleach virgin or recovered content fibers used in product packaging.

8.7. Wood Packaging:

Solid wood packaging materials that are used in international trade and may serve as a pathway for plant pests must be treated and marked when exported or imported and be free of bark, according to UN Standard ISPM-15. For further information, refer to Appendix G.

Sawdust, wood wool, shavings and raw wood cut into thin pieces are not suitable pathways for introduction of quarantine pests and are not regulated unless technically justified.

8.8. Regional Requirements for Product Packaging:

Packaging must comply with various state, country and regional requirements as outlined below. Additional information on these requirements can be obtained from references contained in

<u>Appendix G</u>. More specific requirements driven by the product market will be defined in the Product Requirements Document.

- **8.8.1.** Regional Packaging Reporting: Suppliers must provide the weight, volume, material composition, including recycled content expressed in %, of all the components of the *Packaging* supplied to Kodak in order to facilitate calculation of Regional Packaging reporting obligations.
- **8.8.2.** Requirements in the United States: All Rigid Plastic Packaging Containers (RPPC) must contain at least 25% post-consumer recycled content to meet various state requirements. Exemptions exist for medical products. Other allowable alternatives are limited to those defined in the Product Requirements Document.
- 8.8.3. Requirements in the European Union (EU):

8.8.3.1. European Directive on packaging and packaging waste

Suppliers must provide Kodak with a Certificate of Conformity to "essential requirements" fixed by the Directive 94/62/EC, when requested.

Packaging shall bear the appropriate marking either on the packaging itself or on the label, as provided by Commission Decision of 28 January 1997

8.8.3.2. Manual Handling

The EU Directive on the minimum health and safety requirements for the manual handling of loads requires that manually handled packages, where there is a risk of back injury to workers, be marked with the weight of the

load and the center of gravity when a package is asymmetrically loaded. There is no single weight limit for manual handling. To reduce the risk of musculoskeletal disorders, any package weighing more than 20 kg should be designed by adding additional features, such as handles or handle holes.

8.8.3.3. Dimethylfumarate

According to European Commission Decision on products containing the biocide dimethylfumarate, dimethylfumarate (CAS No. 624-49-7) cannot be present in Packaging at a concentration greater than 0.1 mg/kg. Because this substance is most commonly used in desiccants, Suppliers of these packaging components are required to provide an EU compliant Safety Data Sheet and an analytical test report for dimethylfumarate content from a laboratory accredited to ISO/IEC 17025 or an equivalent standard in order to demonstrate that this requirement has been met.

8.8.4. Requirements in South Korea:

- **8.8.4.1.** Article 14 of the "Act on the Promotion of Saving and Recycling Resources" requires that all foam packaging components used as cushioning materials for electronic equipment in Korea be marked with a "separate discharge" mark. The mark facilitates the separation of products and packaging for recycling. Exemptions include: packaging and packaging component materials with a surface area of 50 cm² or less; containers with components weighing 30 grams or less; and packaging and packaging component materials whose nature and structure impede printing, engraving or labeling on the material.
- **8.8.4.2.** Per Ministry of Environment Notice No. 2019-244 the following packaging materials are not allowed:
 - Poly Vinyl Chloride (PVC) laminations, shrink wraps and coatings
 - Colored Polyethylene Terephthalate (PET) bottles
 - PET bottle label adhesive that does not peel off from the bottle according to Annex 1 of Packaging Material Recyclability Rating Evaluation Standard

9. Appendices

<u>Appendix A – Electrical and Electronic Equipment: Restricted Materials</u>

SUBSTANCE / CATEGORY	REPORTABLE APPLICATION	THRESHOLD LEVEL
Substances listed in IEC 62474 "Declarable substance groups and declarable substances" and "Reference substances" lists, located at http://std.iec.ch/iec62474/iec62474.nsf/Index?open&q=162836 Follow the web address and select on the left-hand side of the screen: "Declarable substance groups and declarable substances" to obtain the list of restricted Substance/Groups "Reference substances" to obtain expanded chemical lists with available Chemical Abstract Services (CAS) numbers	All	As identified in IEC 62474
Substances listed by TSCA section 6(h) located at: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/persistent-bioaccumulative-and-toxic-pbt-chemicals-under-theory.	All	As identified by TSCA 6(h)

Appendix B – Articles: Restricted Materials

SUBSTANCE / CATEGORY	REPORTABLE APPLICATION	THRESHOLD LEVEL
Substances listed in IEC 62474 "Declarable substance groups and declarable substances" and "Reference substances" lists, located at http://std.iec.ch/iec62474/iec62474.nsf/Index?open&q=162836 - Follow the web address and select on the left-hand side of the screen: - "Declarable substance groups and declarable substances" to obtain the list of restricted Substance/Groups - "Reference substances" to obtain expanded chemical lists with available Chemical Abstract Services (CAS) numbers	All Since articles are often in scope of EEE applications, suppliers should identify when a material on this list is intentionally added or known to be present in any article	Intentionally added or Known to be Present as an impurity
Known, Probable or Suspected Carcinogens, Mutagens and Reproductive	All	Intentionally Added or Known
Toxicants: Materials that are included on the following regulatory lists: 1. Known human carcinogens: a. IARC 1; b. ACGIH A1; c. NTP "known to be human carcinogen" 2. Suspected to be carcinogens: a. IARC 2A, IARC 2B; b. ACGIH A2; c. NTP "reasonably anticipated to be a carcinogen" 3. 13 OSHA carcinogens 4. Carcinogen, Mutagen, Reproductive Toxicant (CMR): a. GHS category 1A, 1B & 2;		to be Present as an impurity
 CERHR classification "Serious concern" and "Concern" for adverse reproductive effects CA Proposition 65 list of reproductive/developmental toxicants and carcinogens TSCA Chemicals of Concern categories 		
Other Health Concerns: Materials that are known to cause irreversible significant adverse effects in humans or are strongly presumed to have the potential to cause such effects by relevant routes of exposure (other than carcinogens, mutagens and reproductive toxicants), which are defined as any substance that is included on the following regulatory lists: 1. TSCA Chemicals of Concern 2. GHS criteria: TOST category 1 and 2 3. REACH criteria: STOT (Specific Target Organ Toxicity) category 1 and 2	All	Intentionally Added or Known to be Present as an impurity
Environmental Concerns: Materials that meet the criteria for being persistent, bioaccumulative, and toxic (PBT), very persistent and very bioaccumulative (vPvB), or a persistent organic pollutant (POP) as defined by regulatory agencies, e.g., USEPA Sustainable Futures Guidance, European Union REACH Directive, TSCA 6(h) - OR - Materials with high aquatic toxicity, i.e., acute LC/EC50 values ≤ 1 mg/L, to the environment	All	Intentionally Added or Known to be Present as an impurity
<u>Potent Sensitizers</u> : Materials that are known human sensitizers, which produce sensitization at low exposure levels.	Acrylate monomers, acrylate laminations or overcoats, products containing cross-linkers, hardeners or preservatives	Intentionally Added or Known to be Present as an impurity
¹ Perfluorocarboxylic and polyfluoroalkyl substances (PFAS) - any fully	All	Intentionally Added or Known
fluorinated carbon chain length, often sulfonated compound, including		to be present as an impurity
Perfluorooctane sulfonate (PFOS), PFOS-related substances (C8F17SO2X where X = OH, metal salt, halide, amide, and other derivatives including polymers), perfluorooctanoic acid (PFOA), or PFOA salts.		Use in manufacturing
¹ Polyvinyl Chloride (PVC) Polyvinylidene dichloride (PVDC)	All	0.1% by weight (1000 ppm)

 $^{^1}$ See <u>Appendix E</u> for expanded chemical lists with available Chemical Abstract Services (CAS) numbers. (back to top)

Appendix C – Chemicals: Restricted Materials

CATEGORIES CATEGORIES	REPORTABLE	THRESHOLD LEVEL
	APPLICATION	
Known, Probable or Suspected Carcinogens, Mutagens and Reproductive	All	Intentionally Added or Known
<u>Toxicants</u> : Materials that are included on the following regulatory lists:		to be Present as an impurity
1. Known human carcinogens:		
a. IARC 1;		
b. ACGIH A1;		
c. NTP "known to be human carcinogen"		
2. Suspected to be carcinogens:		
a. IARC 2A, IARC 2B;		
b. ACGIH A2;		
c. NTP "reasonably anticipated to be a carcinogen"		
3. 13 OSHA carcinogens		
4. Carcinogen, Mutagen, Reproductive Toxicant (CMR):		
a. GHS category 1A, 1B, & 2		
5. CERHR classification "Serious concern" and "Concern" for adverse reproductive		
effects		
6. CA Proposition 65 list of reproductive/developmental toxicants and carcinogens		
7. TSCA Chemicals of Concern categories		
Other Health Concerns: Materials that are known to cause irreversible	All	Intentionally Added or Known
significant adverse effects in humans or are strongly presumed to have the		to be Present as an impurity
potential to cause such effects by relevant routes of exposure (other than		
carcinogens, mutagens and reproductive toxicants), which are defined as any		
substance that is included on the following regulatory lists:		
TSCA Chemicals of Concern		
2. GHS criteria: TOST category 1 and 2		
3. REACH criteria: STOT (Specific Target Organ Toxicity) category 1 and 2		
Environmental Concerns: Materials that meet the criteria for being persistent,	All	Intentionally Added or Known
bioaccumulative, and toxic (PBT), very persistent and very bioaccumulative		to be Present as an impurity
(vPvB), or a persistent organic pollutant (POP) as defined by regulatory		
agencies, e.g., USEPA Sustainable Futures Guidance, European Union REACH		
Directive		
- OR -		
Materials with high aquatic toxicity, i.e., acute LC/EC50 values ≤ 1 mg/L, to the		
environment		
<u>Potent Sensitizers</u> : Materials that are known human sensitizers, which produce	All	Intentionally Added or Known
sensitization at low exposure levels.		to be Present as an impurity
	All	Intentionally Added or Known
Substances restricted by ANNEX XVII of REACH Regulation (EC) No 1907/2006		to be Present as an impurity
P. F.	All	Intentionally added
Ozone Depleting Substances [see Appendix E for expanded chemical lists	<i>,</i>	·
with available Chemical Abstract Services (CAS) numbers]		Use in manufacturing
	All	Intentionally added
Fluorinated Greenhouse Gases [see Appendix E for expanded chemical lists	/ WI	<u>'</u>
with available Chemical Abstract Services (CAS) numbers]		Use in manufacturing
Perfluorocarboxylic and polyfluoroalkyl substances (PFAS) - any fully	All	Intentionally Added or Known
fluorinated carbon chain length, often sulfonated compound, including	All	to be present as an impurity
Perfluorooctane sulfonate (PFOS), PFOS-related substances (C8F17SO2X		The process as an impanty
		Use in manufacturing
where X = OH, metal salt, halide, amide, and other derivatives including polymers), perfluorooctanoic acid (PFOA), or PFOA salts.		and in managed in g
polymers), permuorooctanoic aciu (PPOA), or PPOA Salts.		I

<u>Appendix D – Packaging: Restricted Materials</u>

See Appendix E for expanded chemical lists with available Chemical Abstract Services (CAS) numbers.

SUBSTANCE / CATEGORY	REPORTABLE APPLICATION	THRESHOLD LEVEL
Arsenic/Arsenic compounds	All	Intentionally added
Asbestos	All	Intentionally added
Azo Colorants and azodyes which form certain aromatic amines (refer to Appendix E for the list of specific amines)	Textiles and leather	30 ppm
Dibutyl tin (DBT) compounds	All	0.1% by weight of tin (1000 ppm)
Dioctyltin (DOT) compounds	Textiles	0.1% by weight of tin (1000 ppm)
Dimethyl fumarate	All	0.00001% by weight (0.1 ppm) of the packaging item
Heavy Metals: Cadmium/Cadmium Compounds Hexavalent Chromium/Hexavalent Chromium Compounds (Cr+6) Lead/Lead Compounds Mercury/Mercury Compounds	Package or individual packaging component	The total concentration of these heavy metals cannot exceed 100 ppm. Refer to Appendix H for the test methodology.
Formaldehyde	Textiles	0.0075% by weight (75 ppm) of textile item
Methyl bromide	Fumigation of wood pallets in EU	Intentionally added
Ozone Depleting Substances	All	Intentionally added Use in manufacturing
Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)	All	Intentionally added
Polychlorinated biphenyls (PCBs) and specific substitutes	All	Intentionally added
Polychlorinated napthalenes (more than 3 chlorine atoms)	All	Intentionally added
Polychlorinated terphenyls (PCTs)	All	Intentionally added
Tri-substituted organostannic compounds	All	Intentionally added or 0.1% by weight (1000 ppm) of the packaging item

<u>Appendix E – Expanded chemical lists with Chemical Abstract Services (CAS)</u> numbers

These lists are not comprehensive; they represent examples of chemicals listing CAS numbers and/or EC numbers if applicable or available. In case the list is complete (and the reporting requirement is limited to those substances listed) this is indicated in a note below the respective substance category.

TABLE - Asbestos

Asbestos	CAS Numbers
Asbestos	1332-21-4
Actinolite	77536-66-4
Amosite (Grunerite)	12172-73-5
Anthophyllite	77536-67-5
Chrysotile	12001-29-5
Crocidolite	12001-28-4
Tremolite	77536-68-6

TABLE - Azocolorants and azodyes which form certain aromatic amines

Aromatic Amines	CAS Numbers
Biphenyl-4-ylamine	92-67-1
Benzidine	92-87-5
4-chloro-o-toluidine	95-69-2
2-naphthylamine	91-59-8
o-aminoazotoluene	97-56-3
5-nitro-o-toluidine	99-55-8
4-chloroaniline	106-47-8
4-methoxy-m-phenylenediamine	615-05-4
4,4'-methylenedianiline	101-77-9
3,3'-dichlorobenzidine	91-94-1
3,3'-dimethoxybenzidine	119-90-4
3,3'-dimethylbenzidine	119-93-7
4,4'-methylenedi-o-toluidine	838-88-0
6-methoxy-m-toluidine	120-71-8
4,4'-methylene-bis(2-chloroaniline)	101-14-4
4,4'-oxydianiline	101-80-4
4,4'-thiodianiline	139-65-1
o-toluidine	95-53-4
4-methyl-m-phenylenediamine	95-80-7
2,4,5-trimethylaniline	137-17-7
o-anisidine	90-04-0
4-amino azobenzene	60-09-3

Note: The European Community's ban applies to azocolorants and azodyes that by reductive cleavage of azo groups may release one of the above 22 aromatic amines.

TABLE - Dibutyltin Compounds (DBT)

TABLE Bibatyttiii compounds (BBT)		
Dibutyltin Compounds	CAS Numbers	
Dibutyltin oxide	818-08-6	
Dibutyltin diacetate	1067-33-0	
Dibutyltin dilaurate	77-58-7	
Dibutyltin maleate	78-04-6	
Other dibutyltin compounds	-	

TABLE - Dioctyltin Compounds (DOT)

Dioctyltin Compounds	CAS Numbers
Dioctyl Tin Oxide	870-08-6
Dioctyltin dilaurate	3648-18-8
Other Dioctyltin compounds	-

TABLE - Ozone Depleting Substances

Chlorofluorocarbons (CFC), Halons, Hydrobromofluorocarbons (HBFC), Hydrochlorofluorocarbons (HCFC) and others

Ozone Depleting Substances	Ozone- depleting potential	CAS Numbers
Trichlorofluoromethane (CFC-11)	1	75-69-4
Dichlorodifluoromethane (CFC-12)	1	75-71-8
Chlorotrifluoromethane (CFC-13)	1	75-72-9
Pentachlorofluoroethane (CFC-111)	1	354-56-3
Tetrachlorodifluoroethane (CFC-112)	1	76 12 0
1,1,2,2-Tetrachloro-1,2-difluoroethane (CFC-112)	1	76-12-0
1,1,1,2-Tetrachloro-2,2-difluoroethane (CFC-112a)		76-11-9
Trichlorotrifluoroethane (CFC-113) 1,1,2-Trichloro-1,2,2 trifluoroethane (CFC-113)	0.8	76-13-1,
1,1,1-Trichloro-2,2,2 trifluoroethane (CFC-113a)		354-58-5
Dichlorotetrafluoroethane (CFC-114)	1	76-14-2
Monochloropentafluoroethane (CFC-114)	0.8	76-14-2
Monochioropentandoroethane (CFC-113)	0.8	422-78-6
Heptachlorofluoropropane (CFC-211)	1	135401-87-5
1,1,1,2,2,3,3-Heptachloro-3-fluoropropane (CFC-211aa)		422-78-6
1,1,1,2,3,3,3-Heptachloro-2-fluoropropane (CFC-211ba)		422-81-1
Hexachlorodifluoropropane (CFC-212)	1	3182-26-1
	-	2354-06-5
Pentachlorotrifluoropropane (CFC-213)	1	134237-31-3
Tetrachlorotetrafluoropropane (CFC-214)	1	29255-31-0
1,2,2,3-Tetrachloro-1,1,3,3-tetrafluoropropane (CFC-214aa)		2268-46-4
1,1,1,3-Tetrachloro-2,2,3,3-tetrafluoropropane (CFC-214cb)		-
Trichloropentafluoropropane (CFC-215)	1	1599-41-3
1,2,2-Trichloropentafluoropropane (CFC-215aa)		1599-41-3
1,2,3-Trichloropentafluoropropane (CFC-215ba)		76-17-5
1,1,2-Trichloropentafluoropropane (CFC-215bb)		-
1,1,3-Trichloropentafluoropropane (CFC-215ca)		-
1,1,1-Trichloropentafluoropropane (CFC-215cb)		4259-43-2
Dichlorohexafluoropropane (CFC-216)	1	661-97-2
Chloroheptafluoropropane (CFC-217)	1	422-86-6
Bromochloromethane (Halon-1011)		74-97-5
Dibromodifluoromethane (Halon-1202)		75-61-6
Bromochlorodifluoromethane (Halon-1211)	3	353-59-3
Bromotrifluoromethane (Halon-1301)	10	75-63-8
Dibromotetrafluoroethane (Halon-2402)	6	124-73-2
Tetrachloromethane (carbon tetrachloride)	1.1	56-23-5
1,1,1-Trichloroethane (methylchloroform)	0.1	71-55-6
Bromomethane (methyl bromide)	0.6	74-83-9
Bromoethane (ethyl bromide)		74-96-4

	Ozone-	CACAL I
Ozone Depleting Substances	depleting	CAS Numbers
1 Drawagayayaya (n. magayl hagasida)	potential	100.04.5
1-Bromopropane (n-propyl bromide)		106-94-5
Trifluoroiodomethane (trifluoromethyl iodide)		2314-97-8
Chloromethane (methyl chloride)	1	74-87-3
Dibromofluoromethane (HBFC-21 B2)	1	1868-53-7
Bromodifluoromethane (HBFC-22 B1)	0.74	1511-62-2
Bromofluoromethane (HBFC-31 B1)	0.73	373-52-4
Tetrabromofluoroethane (HBFC-121 B4)	0.8	306-80-9
Tribromodifluoroethane (HBFC-122 B3)	1.8	-
Dibromotrifluoroethane (HBFC-123 B2)	1.6	354-04-1
Bromotetrafluoroethane (HBFC-124 B1)	1.2	124-72-1
Tribromofluoroethane (HBFC-131 B3)	1.1	-
Dibromodifluoroethane (HBFC-132 B2)	1.5	75-82-1
Bromotrifluoroethane (HBFC-133 B1)	1.6	421-06-7
Dibromofluoroethane (HBFC-141 B2)	1.7	358-97-4
Bromodifluoroethane (HBFC-142 B1)	1.1	420-47-3
Bromofluoroethane (HBFC-151 B1)	0.1	762-49-2
Hexabromofluoropropane (HBFC-221 B6)	1.5	-
Pentabromodifluoropropane (HBFC-222 B5)	1.9	-
Tetrabromotrifluoropropane (HBFC-223 B4)	1.8	-
Tribromotetrafluoropropane (HBFC-224 B3)	2.2	-
Dibromopentafluoropropane (HBFC-225 B2)	2	431-78-7
Bromohexafluoropropane (HBFC-226 B1)	3.3	2252-78-0
Pentabromofluoropropane (HBFC-231 B5)	1.9	-
Tetrabromodifluoropropane (HBFC-232 B4)	2.1	-
Tribromotrifluoropropane (HBFC-233 B3)	5.6	-
Dibromotetrafluoropropane (HBFC-234 B2)	7.5	-
Bromopentafluoropropane (HBFC-235 B1)	1.4	460-88-8
Tetrabromofluoropropane (HBFC-241 B4)	1.9	-
Tribromodifluoropropane (HBFC-242 B3)	3.1	70192-80-2
Dibromotrifluoropropane (HBFC-243 B2)	2.5	431-21-0
Bromotetrafluoropropane (HBFC-244 B1)	4.4	679-84-5
Tribromofluoropropane (HBFC-251 B3)	0.3	75372-14-4
Dibromodifluoropropane (HBFC-252 B2)	1	460-25-3
Bromotrifluoropropane (HBFC-253 B1)	0.8	421-46-5
Dibromofluoropropane (HBFC-261 B2)	0.4	51584-26-0
Bromodifluoropropane (HBFC-262 B1)	0.8	_
Bromofluoropropane (HBFC-271 B1)	0.7	1871-72-3
Dichlorofluoromethane (HCFC-21)	0.04	75-43-4
Chlorodifluoromethane (HCFC-22)	0.055	75-45-6
Chlorofluoromethane (HCFC-31)	0.02	593-70-4
, , ,		134237-32-
Tetrachlorofluoroethane (HCFC-121)	0.04	4
1,1,2,2-Tetrachloro-1-fluoroethane (HCFC-121)		354-14-3
1,1,1,2-Tetrachloro-2-fluoroethane (HCFC-121a)		354-11-0
Trichlorodifluoroethane (HCFC-122)		41834-16-6
1,2,2-Trichloro-1,1-difluoroethane (HCFC-122)	0.08	354-21-2
1,1,2-Trichloro-1,2-difluoroethane (HCFC-122a)		354-15-4
1,1,1-Trichloro-2,2-difluoroethane (HCFC-122b)		354-12-1
Dichlorotrifluoroethane (HCFC-123)		34077-87-7
1,1-Dichloro-2,2,2-trifluoroethane (HCFC-123)	0.02	306-83-2
, , , , , , , , , , , , , , , , , , , ,	-	

	_	
	Ozone-	CACAL I
Ozone Depleting Substances	depleting	CAS Numbers
	potential	254 22 4
1,2-Dichloro-1,1,2-trifluoroethane (HCFC-123a)		354-23-4
4.4 Pi 11	 	90454-18-5
1,1-Dichloro-1,2,2-trifluoroethane (HCFC-123b)	0.022	812-04-4
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)	0.022	2837-89-0
1-chloro-1,1,2,2-tetrafluoroethane (HCFC-124a)		354-25-6
Trichlorofluoroethane (HCFC-131)	0.05	27154-33-2
1,1,2-Trichloro-2-fluoroethane (HCFC-131)	0.05	134237-34-6
4.4.2 Triabless 4.5h.sss.ath.sss. (UCCC424-)		359-28-4
1,1,2-Trichloro-1-fluoroethane (HCFC131a)	 	811-95-0
1,1,1-Trichloro-2-fluoroethane (HCFC-131b)		2366-36-1
Dichlorodifluoroethane (HCFC-132)	0.05	25915-78-0
1,2-Dichloro-1,2-difluoroethane (HCFC-132)		431-06-1
1,1-Dichloro-2,2-difluoroethane (HCFC-132a)		471-43-2
1,2-Dichloro-1,1-difluoroethane (HCFC-132b)		1649-08-7
1,1-Dichloro-1,2-difluoroethane (HFCF-132c)		1842-05-3
Chlorotrifluoroethane (HCFC-133)		1330-45-6
1-Chloro-1,2,2-trifluoroethane (HCFC-133)	0.06	431-07-2
		1330-45-6
2-Chloro-1,1,1-trifluoroethane (HCFC-133a)		75-88-7
1-Chloro-1,1,2-trifluoroethane (HCFC-133b)		421-04-5
Dichlorofluoroethane(HCFC-141)		1717-00-6
1,2-Dichloro-1-fluoroethane (HCFC-141)		25167-88-8
	0.07	430-57-9
1,1-Dichloro-2-fluoroethane (HCFC-141a)		430-53-5
1,1-Dichloro-1-fluoroethane (HCFC-141b)	0.11	1717-00-6
Chlorodifluoroethane (HCFC-142)	0.07	25497-29-4
2-Chloro-1,1-Difluoroethane (HCFC-142)		338-65-8
1-Chloro-1,2-difluoroethane (HCFC-142a)		338-64-7
1-Chloro-1,1-difluoroethane (HCFC-142b)	0.065	75-68-3
Chlorofluoroethane (HCFC-151)		110587-14-
1-Chloro-2-fluoroethane (HCFC-151)	0.005	9
		762-50-5
1-Chloro-1-fluoroethane (HCFC-151a)		1615-75-4
		134237-35-
Hexachlorofluoropropane (HCFC-221)	0.07	7
		29470-94-8
1,1,1,2,2,3-Hexachloro-3-fluoropropane (HCFC-221ab)		422-26-4
Pentachlorodifluoropropane (HCFC-222)	0.09	134237-36-
		8
1,1,1,3,3-pentachloro-2,2-difluoropropane (HCFC-222ca))		422-49-1
1,2,2,3,3-pentachloro-1,1-difluoropropane (HCFC-222aa)		422-30-0
Tetrachlorotrifluoropropane (HCFC-223)	0.08	134237-37-
	5.55	9
1,1,3,3-Tetrachloro-1,2,2-trifluoropropane (HCFC-223ca)		422-52-6
1,1,1,3-Tetrachloro-2,2,3-trifluoropropane (HCFC-223cb)		422-50-4
Trichlorotetrafluoropropane (HCFC-224)	0.09	134237-38-
	5.55	0
1,3,3-Trichloro-1,1,2,2-tetrafluoropropane (HCFC-224ca)		422-54-8
1,1,3-Trichloro-1,2,2,3-tetrafluoropropane (HCFC-224cb)		422-53-7
1,1,1-Trichloro-2,2,3,3-tetrafluoropropane (HCFC-224cc)		422-51-7
Dichloropentafluoropropane (HCFC-225)	0.07	127564-92-
Significaçõe interior opropario (filor 6-223)	5.07	5

Ozone Depleting Substances	Ozone- depleting potential	CAS Numbers
2,2-Dichloro-1,1,1,3,3-pentafluoropropane(HCFC-225aa)		128903-21- 9
2,3-Dichloro-1,1,1,2,3-pentafluoropropane (HCFC-225ba)		422-48-0
1,2-Dichloro-1,1,2,3,3-pentafluoropropane (HCFC-225bb)		422-44-6
3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)	0.025	422-56-0
1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)	0.033	507-55-1
1,1-Dichloro-1,2,2,3,3-pentafluoropropane(HCFC-225cc)		13474-88-9
1,2-Dichloro-1,1,3,3,3-pentafluoropropane (HCFC-225da)		431-86-7
1,3-Dichloro-1,1,2,3,3-pentafluoropropane (HCFC-225ea)		136013-79- 1
1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb)		111512-56- 2
Chlorohexafluoropropane (HCFC-226)	0.1	134308-72- 8
2-Chloro-1,1,1,3,3,3-hexafluoro-propane (HCFC-226da)		431-87-8
Pentachlorofluoropropane (HCFC-231)	0.09	134190-48- 0
1,1,1,2,3-pentachloro-2-fluoro-propane (HCFC-231bb)		421-94-3
Tetrachlorodifluoropropane (HCFC-232)	0.1	134237-39-
	0.1	1
1,1,1,3-Tetrachloro-3,3-difluoropropane (HCFC-232fc)		460-89-9
Trichlorotrifluoropropane (HCFC-233)	0.23	134237-40- 4
1,1,1-Trichloro-3,3,3-trifluoropropane (HCFC-233fb)		7125-83-9
Dichlorotetrafluoropropane (HCFC-234)	0.28	127564-83- 4
1,2-Dichloro-1,2,3,3-tetrafluoropropane (HCFC-234db)		425-94-5
Chloropentafluoropropane (HCFC-235)	0.52	134237-41- 5
1-Chloro-1,1,3,3,3-pentafluoropropane (HCFC-235fa)		460-92-4
Tetrachlorofluoropropane (HCFC-241)	0.09	134190-49- 1
1,1,2,3-Tetrachloro-1-fluoropropane (HCFC-241db)		666-27-3
Trichlorodifluoropropane (HCFC-242)	0.13	134237-42- 6
1,3,3,Trichloro-1,1-difluoropropane (HCFC-242fa)		460-63-9
Dichlorotrifluoropropane (HCFC-243)	0.12	134237-43- 7
1,1-Dichloro-1,2,2-trifluoropropane (HCFC-243cc)		7125-99-7
2,3-Dichloro-1,1,1-trifluoropropane (HCFC-243db)		338-75-0
3,3-Dichloro-1,1,1-trifluoropropane (HCFC-243fa)		460-69-5
Chlorotetrafluoropropane (HCFC-244)	0.14	134190-50- 4
3-Chloro-1,1,2,2-tetrafluoropropane (HCFC-244ca)		679-85-6
1-Chloro-1,1,2,2-tetrafluoropropane (HCFC-244cc)		421-75-0
Trichlorofluoropropane (HCFC-251)	0.01	134190-51- 5
1,1,3-Trichloro-1-fluoropropane (HCFC-251fb)		818-99-5
1,1,2-Trichloro-1-fluoropropane (HCFC-251dc)		421-41-0
Dichlorodifluoropropane (HCFC-252)	0.04	134190-52- 6
1,3-Dicloro-1,1-difluoropropane (HCFC-252fb)		819-00-1

Ozone Depleting Substances	Ozone- depleting potential	CAS Numbers
Chlorotrifluoropropane (HCFC-253)	0.03	134237-44- 8
3-Chloro-1,1,1-trifluoropropane (HCFC-253fb)		460-35-5
Dichlorofluoropropane (HCFC-261)	0.02	134237-45- 9
1,1-Dichloro-1-fluoropropane (HCFC-261fc)		7799-56-6
1,2-Dichloro-2-fluoro-propane (HCFC-261ba)		420-97-3
Chlorodifluoropropane (HCFC-262)	0.02	134190-53- 7
1-Chloro-2,2-difluoropropane (HCFC-262ca)		420-99-5
2-Chloro-1,3-difluoropropane (HCFC-262da)		102738-79- 4
1-Chloro-1,1-difluoropropane (HCFC-262fc)		421-02-03
Chlorofluoropropane (HCFC-271)	0.03	134190-54- 8
2-Chloro-2-fluoropropane (HCFC-271ba)		420-44-0
1-Chloro-1-fluoropropane (HCFC-271fb)		430-55-7
Bromochloromethane	0.12	
Mixtures containing chlorofluorocarbons (CFCs), whether or not containing hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs) or hydrofluorocarbons (HFCs)		
Mixtures containing bromochlorodifluoromethane, bromotrifluoromethane or dibromotetrafluoroethanes		
Mixtures containing hydrobromofluorocarbons (HBFCs)		
Mixtures containing hydrochlorofluorocarbons (HCFCs), whether or not containing perfluorocarbons (PFCs) or hydrofluorocarbons (HFCs), but not containing chlorofluorocarbons (CFCs)	_	
Mixtures containing carbon tetrachloride		
Mixtures containing 1,1,1-trichloroethane (methyl chloroform) Mixtures containing bromomethane (methyl bromide) or bromochloromethane		

Note: These substances may contain further isomers that are not listed here. Isomers with CAS numbers have been included when available.

TABLE - Perfluorocarboxylic and polyfluoroalkyl substances (PFAS)

, , , , , ,	<u> </u>
Perfluorocarboxylic and polyfluoroalkyl substances (PFAS) including Perfluorooctane sulfonate (PFOS), PFOS-related substances, PFOA, PFOA-related substances	CAS Numbers
Any fully fluorinated carbon chain length, often sulfonated compound	-
$C_8F_{17}SO_2X$ where X = OH, metal salt, halide, amide, and other derivatives	-
including polymers	
Compounds that contain one of the following groups C8F17SO2, C8F17SO3 or C8F17SO2N	-

TABLE - Polychlorinated Biphenyls (PCBs) and specific substitutes

Polychlorinated Biphenyls (PCBs)	CAS Numbers
Polychlorinated Biphenyls (all isomers and congeners)	1336-36-3
Monomethyl-tetrachloro-diphenyl methane (Ugilec 141)	76253-60-6
Monomethyl-dichloro-diphenyl methane (Ugilec 121, Ugilec 21)	81161-70-8
Monomethyl-dibromo-diphenyl methane (DBBT)	99688-47-8

TABLE - Polychlorinated Terphenyls (PCTs)

Polychlorinated Terphenyls (PCTs)	CAS Numbers
Polychlorinated Terphenyls (all isomers and congeners)	61788-33-8

TABLE - Polychlorinated Naphthalenes

Polychlorinated Naphthalenes	CAS Numbers
Polychlorinated Naphthalenes	70776-03-3
Other polychlorinated Naphthalenes	-

TABLE - (PVC) Polyvinyl Chloride

Polyvinyl Chloride	CAS Numbers
Polyvinyl chloride (PVC)	9002-86-2
Polyvinylidene dichloride (PVDC)	9002-85-1
Other Polyvinyl chlorides	-
PVC Copolymers	-

TABLE - Tri-substituted Organnostannic Compounds

Tri-substituted Organostannic Compounds	CAS Numbers
Triphenyltin-N, N-dimethyldithiocarbamate	1803-12-9
Triphenyltinfluoride	379-52-2
Triphenyltinacetate	900-95-8
Triphenyltinchloride	639-58-7
Triphenyltinhydroxide	76-87-9
Triphenyltin fattyacid((9-11)salt)	18380-71-7
	18380-72-8
	47672-31-1
	94850-90-5
Triphenyltinchloroacetate	7094-94-2
Tributyltinmethacrylate	2155-70-6
Bis(tributyltin)fumalate	6454-35-9
Tributyltinfluoride	1983-10-4
Bis(tributyltin)2,3-dibromosuccinate	31732-71-5
Tributyltinacetate	56-36-0
Tributyltinlaurate	3090-36-6
Bis(tributyltin)phthalate	4782-29-0
Copolymer of alkyl(c=8) acrylate, methyl methacrylate and tributyltin methacrylate	67772-01-4
Tributyltinsulfamate	6517-25-5
Bis(tributyltin)maleate	14275-57-1
Tributyltinchloride	1461-22-9
	7342-38-3
Tributyltin cyclopentane carbonate = mixture	85409-17-2

Tri-substituted Organostannic Compounds	CAS Numbers
Tributyltin-1,2,3,4,4a,4b,5,6,10,10a-decahydro-7-isoplopyl-1,4a-dimethyl-1-	26239-64-5
phenanthrencarboxylatemix	
Other tri-substituted organostannic compounds	-

TABLE - Fluorinated Greenhouse Gases

Hydrofluorocarbons (HFCs); Perfluorocarbons (PFCs); Other perfluorinated compounds Unsaturated hydro(chloro)fluorocarbons; Fluorinated ethers and alcohols; Other perfluorinated compounds

Fluorinated Greenhouse Gases	Global Warming Potential	CAS Numbers
Trifluoromethane (fluoroform)(HFC-23)	14800	75-46-7
Difluoromethane(HFC-32)	675	75-10-5
Fuoromethane (methyl fluoride)(HFC-41)	92	593-53-3
Pentafluoroethane(HFC-125)	3500	354-33-6
1,1,2,2-tetrafluoroethane(HFC-134)	1100	359-35-3
1,1,1,2-tetrafluoroethane(HFC-134a)	1430	811-97-2
1,1,2-trifluoroethane(HFC-143)	353	430-66-0
1,1,1-trifluoroethane(HFC-143a)	4470	420-46-2
1,2-difluoroethane(HFC-152)	53	624-72-6
1,1-difluoroethane(HFC-152a)	124	75-37-6
Fluoroethane(ethyl fluoride)(HFC-161)	12	353-36-6
1,1,1,2,3,3,3-heptafluoropropane(HFC-227ea)	3220	431-89-0
1,1,1,2,2,3-hexafluoropropane(HFC-236cb)	1340	677-56-5
1,1,1,2,3,3-hexafluoropropane(HFC-236ea)	1370	431-63-0
1,1,1,3,3,3-hexafluoropropane(HFC-236fa)	9810	690-39-1
1,1,2,2,3-pentafluoropropane(HFC-245ca)	693	679-86-7
1,1,1,3,3-pentafluoropropane(HFC-245fa)	1030	460-73-1
1,1,1,3,3-pentafluorobutane(HFC-365 mfc)	794	406-58-6
1,1,1,2,2,3,4,5,5,5-decafluoropentane(HFC-43-10 mee)	1640	138495-42- 8
Tetrafluoromethane (perfluoromethane, carbon tetrafluoride) (PFC-14)	7,390	75-73-0
Hexafluoroethane (perfluoroethane) (PFC-116)	12,200	76-16-4
Octafluoropropane (perfluoropropane) (PFC-218)	8,830	76-19-7
Decafluorobutane (perfluorobutane) (PFC-3-1-10 (R-31-10))	8,860	355-25-9
Dodecafluoropentane (perfluoropentane) (PFC-4-1-12 (R-41-12))	9,160	678-26-2
Tetradecafluorohexane (perfluorohexane) (PFC-5-1-14 (R-51-14))	9,300	355-42-0
Octafluorocyclobutane (perfluorocyclobutane) (PFC-c-318)	10,300	115-25-3
HFC-1234yf	4	-
HFC-1234ze	7	-
HFC-1336mzz	9	-
HCFC-1233zd	4.5	-
HCFC-1233xf	1	-
HFE-125	14,900	-
HFE-134 (HG-00)	6,320	-
HFE-143a	756	-
HCFE-235da2 (isofluorane)	350	-
HFE-245cb2	708	-
HFE-245fa2	659	-
HFE-254cb2	359	-
HFE-347 mcc3 (HFE-7000)	575	-
HFE-347pcf2	580	-

Fluorinated Greenhouse Gases	Global Warming Potential	CAS Numbers
HFE-356pcc3	110	-
HFE-449sl (HFE-7100)	297	_
HFE-569sf2 (HFE-7200)	59	_
HFE-43-10pccc124 (H-Galden 1040x) HG-11	1,870	_
HFE-236ca12 (HG-10)	2,800	_
HFE-338pcc13 (HG-01)	1,500	-
HFE-347 mmy1	343	-
2.2.3.3.3-pentafluoropropanol	42	-
bis(trifluoromethyl)-methanol	195	-
HFE-227ea	1,540	-
HFE-236ea2 (desfluoran)	989	-
HFE-236fa	487	-
HFE-245fa1	286	-
HFE 263fb2	11	-
HFE-329 mcc2	919	-
HFE-338 mcf2	552	-
HFE-338 mmz1	380	-
HFE-347 mcf2	374	-
HFE-356 mec3	101	-
HFE-356 mm1	27	-
HFE-356pcf2	265	-
HFE-356pcf3	502	-
HFE 365 mcf3	11	-
HFE-374pc2	557	-
Perfluoropolymethylisopropylether (PFPMIE)	10,300	-
Nitrogen trifluoride	17,200	-
Trifluoromethyl sulfur pentafluoride	17,700	-
Perfluorocyclopropane	17,340	-

Common Mixtures

Blend	Constituents	Composition (%)
R400	CFC-12/CFC-114	
R401A	HCFC-22/HFC-152a/HCFC-12427	(53.0/13.0/34.0)
R401B	HCFC-22/HFC-152a/HCFC-124	(61.0/11.0/28.0)
R401C	HCFC-22/HFC-152a/HCFC-124	(33.0/15.0/52.0)
R402A	HFC-125/HC-290/HCFC-22	(60.0/2.0/38.0)
R402B	HFC-125/HC-290/HCFC-22	(38.0/2.0/60.0)
R403A	HC-290/HCFC-22/PFC-218	(5.0/75.0/20.0)
R403B	HC-290/HCFC-22/PFC-218	(5.0/56.0/39.0)
R404A	HFC-125/HFC-143a/HFC-134a	(44.0/52.0/4.0)
R405A	HCFC-22/ HFC-152a/ HCFC-142b/PFC-318	(45.0/7.0/5.5/42.5)
R406A	HCFC-22/HC-600a/HCFC-142b	(55.0/4.0/41.0)
R407A	HFC-32/HFC-125/HFC-134a	(20.0/40.0/40.0)
R407B	HFC-32/HFC-125/HFC-134a	(10.0/70.0/20.0)
R407C	HFC-32/HFC-125/HFC-134a	(23.0/25.0/52.0)
R407D	HFC-32/HFC-125/HFC-134a	(15.0/15.0/70.0)
R407E	HFC-32/HFC-125/HFC-134a	(25.0/15.0/60.0)
R407F	HFC-32/HFC-125/HFC-134a	(30.0/30.0/40.0)
R408A	HFC-125/HFC-143a/HCFC-22	(7.0/46.0/47.0)
R409A	HCFC-22/HCFC-124/HCFC-142b	(60.0/25.0/15.0)
R409B	HCFC-22/HCFC-124/HCFC-142b	(65.0/25.0/10.0)
R410A	HFC-32/HFC-125	(50.0/50.0)

Blend	Constituents	Composition (%)
R410B	HFC-32/HFC-125	(45.0/55.0)
R411A	HC-1270/HCFC-22/HFC-152a	(1.5/87.5/11.0)
R411B	HC-1270/HCFC-22/HFC-152a	(3.0/94.0/3.0)
R411C	HC-1270/HCFC-22/HFC-152a	(3.0/95.5/1.5)
R412A	HCFC-22/PFC-218/HCFC-142b	(70.0/5.0/25.0)
R413A	PFC-218/HFC-134a/HC-600a	(9.0/88.0/3.0)
R414A	HCFC-22/HCFC-124/HC-600a/HCFC-142b	(51.0/28.5/4.0/16.5)
R414B	HCFC-22/HCFC-124/HC-600a/HCFC-142b	(50.0/39.0/1.5/9.5)
R415A	HCFC-22/HFC-152a	(82.0/18.0)
R415B	HCFC-22/HFC-152a	(25.0/75.0)
R416A	HFC-134a/HCFC-124/HC-600	(59.0/39.5/1.5)
R417A	HFC-125/HFC-134a/HC-600	(46.6/50.0/3.4)
R418A	HC-290/HCFC-22/HFC-152a	(1.5/96.0/2.5)
R419A	HFC-125/HFC-134a/HE-E170	(77.0/19.0/4.0)
R420A	HFC-134a/HCFC-142b	(88.0/12.0)
R421A	HFC-125/HFC-134a	(58.0/42.0)
R421B	HFC-125/HFC-134a	(85.0/15.0)
R422A	HFC-125/HFC-134a/HC-600a	(85.1/11.5/3.4)
R422B	HFC-125/HFC-134a/HC-600a	(55.0/42.0/3.0)
R422C	HFC-125/HFC-134a/HC-600a	(82.0/15.0/3.0)
R500	CFC-12/HFC-152a	(73.8/26.2)
R501	HCFC-22/CFC-12	(75.0/25.0)
R502	HCFC-22/CFC-115	(48.8/51.2)
R503	HFC-23/CFC-13	(40.1/59.9)
R504	HFC-32/CFC-115	(48.2/51.8)
R505	CFC-12/HCFC-31	(78.0/22.0)
R506	CFC-31/CFC-114	(55.1/44.9)
R507A	HFC-125/HFC-143a	(50.0/50.0)
R508A	HFC-23/PFC-116	(39.0/61.0)
R508B	HFC-23/PFC-116	(46.0/54.0)
R509A	HCFC-22/PFC-218	(44.0/56.0)

<u>Appendix F – Safety Traceability Requirements for Critical Components</u>

Description	Plastic & Foam	Wire Harness	Circuit Boards	Safety Label
Requirements	Materials must be identifiable to safety agency inspectors.	Must be identifiable as having been produced under the UL Recognized Wire Harness Manufacturer's Program and CSA Certified Wire Harness Program.	Must be identifiable as having been produced under the UL Recognized Component Printed Wiring Program.	Must be identifiable as having been produced under the UL and CSA Marking and Labeling System approval programs.
Required Information from supplier with each shipment	1. Molder name 2. Kodak part number 3. Raw material manufacturer name 4. Plastic manufacturer type designation (e.g.,"Cycoloy C6200") 5. Month and year molded 6. UL Recognized Molder program number, if applicable In addition, for parts with metallic (EMI) coating, identify the applicator, the process used and the metallic (EMI) coating material used.	Wire Harness label on the shipping container or on each harness	Mark parts according to UL Printed Wiring Program (e.g. Manufacturer's name or trademark and board type.)	Manufacture r's identity (e.g., name or trademark) and manufacture r's label type (e.g. Type 123).
Acceptable methods to provide traceability to Kodak	·Molded on each part or ·"Stuffer sheet" containing the 6 items above in the smallest shipping container or ·Label on every shipping container stating the 6 items above.	·Label on each harness ·Label the smallest deliverable package. ·Label the shipping box for the harnesses contained in the box.	Mark parts according to UL Printed Wiring Program requirements.	·For CSA approved labels, place identifier on each label. ·For UL approved labels, place the identifier on each label or smallest delivered package.
Related supplier safety expectations	Parts will be produced under the UL Recognized Fabricated Parts Program.	Harnesses will be produced under the UL Recognized Wiring Harness Manufacturer program and be CSA Certified.	Parts will be produced under the UL Recognized Printed Wiring Board program.	Safety labels will be approved to UL/CSA "Marking and Labeling System" requirements.

Appendix G – Packaging References

European Parliament and Council Directive 94/62/EC on Packaging and Packaging Waste (Amended by Directive (EU) 2018/852)

Further information can be obtained at:

http://europa.eu/legislation summaries/environment/waste management/l21207 en.htm

Plastic Packaging Materials

Further Information on the SPI resin identification code can be obtained at:

https://www.astm.org/Standards/D7611.htm

Wood Packaging Materials

Approved treatment includes fumigation with methyl bromide or heat treatment (HT)—heated to a core temperature of 56 deg C (133 deg F) for 30 min. Kiln drying (KD) or chemical pressure impregnation (CPI) may be considered heat treatment to the extent that these meet the heat treatment specifications mentioned.

Treated solid wood packaging materials must be marked with the International Plant Protection Convention (IPPC) logo, the ISO two-letter country code followed by a unique number assigned by the National Plant Protection Organization (NPPO) to the producer, and the IPPC approved abbreviation for the phytosanitary treatment measure used (e.g., HT and MB).

Recycled, remanufactured or repaired wood packaging material should be re-certified and re-marked. All components of such material should have been treated.

Further information may be obtained at https://www.ippc.int/.

European Council Directive 90/269/EEC on Manual Handling Requirements

Further information can be found at:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1990L0269:20070627:EN:PDF

Korean Separate Discharge Mark

Further information can be found at:

Korean Separate Discharge System

<u>Appendix H – Instructions for Testing and Sampling Heavy Metals in Packaging</u>

CHEMICAL	TECHNIQUE	SPECIFICATION	TEST METHOD*
Cadmium	Inductively	Less than 100 ppm	6010
	coupled plasma	total with Pb, Hg, and	
		Cr (VI)	
Lead	Inductively	Less than 100 ppm	6010
	coupled plasma	total with Cd, Hg, and	
		Cr (VI)	
Mercury	Cold Vapor	Less than 100 ppm	7470, 7471
	Atomic	total with Cd, Pb, and	
	Absorption	Cr (VI)	
	Spectroscopy		
Chromium VI	Atomic	Less than 100 ppm	7190, 7195, 7196,
	Absorption	total with Cd, Pb, and	7197
	Spectroscopy	Hg	

^{*} Test Method - The US EPA's SW 846 set of analytical methods for the determination of chemical concentrations in wastes and other materials.

<u>Appendix I – Revision History</u>

Rev.	Section	Change	Date
7.1	5.3-	Inserted 5.3. TSCA section 6(h) – Persistent, Bioaccumulative and Toxic (PBT) Chemicals which in turn	6/8/2021
		renumbered subsequent sections.	
7.0	8.2	Added Section 8.2 Materials Requiring Declaration	5/15/2017
	All	Updated formatting. (RJ Pollard/Erin Semple)	4/27/2017
	6.2.2	Added phthalates, PCBs and "unless approved by Kodak" for products that require Prop 65 labeling.	
	Appendix G	Deleted original Appendix G and reassigned Appendices H, I and J to G, H and I including all references	6/26/2018
		to them. (C. Hasenauer)	
	3.3	Added reference to Kodak's authorized third-party (C. Hasenauer)	6/26/2018
	3.4	Revised wording to indicate "must have a due diligence process". (C. Hasenauer)	6/26/2018
	3.5	Added reference to Kodak Procurement contact (c. Hasenauer)	6/26/2018
	4.0	Revised note in "Articles" to indicate certain articles that should be treated as EEE. Removed	6/26/2018
		reference to Packaging Related Product Components (C. Hasenauer)	
	4.0	Revised "Conflict Minerals" to include reference to EU regulation and SEC Form SD. (C. Hasenauer)	6/26/2018
	4.0	Added definition of Large-scale industrial tool (C. Hasenauer)	6/26/2018
	4.0	Added definition of Nanomaterials (Erin Semple)	6/26/2018
	4.0	Deleted Packaging Related Components (C. Hasenauer)	6/26/2018
	5.0, 5.5.7, 5.6	Added sections for EEE Containing Chemicals and Packaging (P. Vernaudon/C. Hasenauer)	6/26/2018
	5.4	Added IEC and ANSI Designations (C. Hasenauer)	6/26/2018
	5.5.1, 5.5.2	Deleted reference to Appendix G (C. Hasenauer)	6/26/2018
	6.0, 6.8	Added Packaging section (P. Vernaudon)	6/26/2018
	6.2.4	Revised nanomaterials requirement (Erin Semple)	6/26/2018
	7.0, 7.10	Added Packaging (P. Vernaudon)	6/26/2018
	7.2.1	Removed flashpoint, pH, Reactivity, LogP for biocides (Erin Semple)	6/26/2018
	7.2.2	Revised nanomaterial requirement (Erin Semple)	6/26/2018
	7.2.3	Added F-Gas and revised ODS requirement (P. Vernaudon)	6/26/2018
	7.5	Added SVHC requirement (lan Barford)	6/26/2018
	7.7	Deleted wording "identified in the Product Requirements Document (PRD)	6/26/2018
	8.1	Added section on Environmental Impact (P. Vernaudon)	6/26/2018
	Definitions	Added references to the WEEE Directive to the LSSIT definition (P. Vernaudon/C. Hasenauer)	8/10/2018
	8.5	Added statement regarding limiting use of plastic bags	8/9/2018
	Appendix C	Added section on F-gases (P. Vernaudon)	6/26/2018
	Appendix E	Added section F-gas Table and updated ODS Table (P. Vernaudon)	6/26/2018
	3.2	Added "The request from Kodak for Conflict Minerals information may be made through an	12/5/2019
		authorized third-party." (C. Hasenauer)	
	3.5	Replaced "the DF" with "a DF that has been previously submitted.", added "Suppliers of equipment	12/5/2019
		products and components for which Kodak uses and authorized third-party to gather conformance	
		information must respond to requests on an ongoing basis as restricted and reportable substance lists	
		are updated by authorities multiple times per year." (C. Hasenauer)	
	4.0 (EEE)	Replaced "paper trays" with "mechanical and electromechanical sub-assemblies" (C. Hasenauer)	12/5/2019
	5.2	Added "EU REACH" to the title, added "constituent articles of" to the end of the first sentence and	12/5/2019
		added last sentence regarding third-party information gathering (C. Hasenauer)	
	5.5.2	Replaced C-Tick with RCM (C. Hasenauer)	12/5/2019
	5.5.1	Moved the word standards to after ASTM. (C. Hasenauer)	12/5/2019
	5.5.8	Replaced old regulation reference with current regulation (C. Hasenauer)	12/5/2019
	Appendix A	Updated link address (C. Hasenauer)	12/5/2019
	Appendix B	Updated link address (C. Hasenauer)	12/5/2019
	6.0	Deleted "composite Wood" link. There is no composite wood requirement in the specification (C.	12/5/2019
		Hasenauer)	

Rev.	Section	Change	Date
	5.1	Deleted Kodak ROHS exception "the Supplier provides a written declaration indicating a substance	12/5/2019
		specified in CDD 2015/863 is used at concentration greater than the prescribed threshold (to be	
		allowed through 31 December 2017), and Kodak provides written permission to the supplier	
	confirming acceptance of the use for the given application, or (C. Hasenauer)		
	1.0	Wording updated requiring suppliers to meet legal requirements that may have changed after the	12/12/2019
	current version of EKSP-2285 was published. (P. Vernaudon)		
	4.0	Deleted flexographic printing plates (P. Vernaudon)	12/12/2019
	5.5	Added "and legally required compliance documentation is delivered with the equipment, for example	12/12/2019
		serialized EU CE Declaration of Conformity for Machinery Directive equipment"	
	7.6	Removed the reference to Log Pow (I. Barford)	12/17/2019
	6.2.1	Corrected the reference for Candidate List of SVHCs (I. Barford)	12/17/2019
	7.5	Corrected the reference for Candidate List of SVHCs (I. Barford)	12/17/2019
	8.4	Corrected the reference for Candidate List of SVHCs (I. Barford)	12/17/2019
	Appendix B	Updated the PFOS entry to cover all PFAS, not just "PFOS and related substances" (I. Barford)	12/17/2019
	Appendix C	Updated the PFOS entry to cover all PFAS, not just "PFOS and related substances" (I. Barford)	12/17/2019
	Appendix E	Updated the PFOS entry to cover all PFAS, not just "PFOS and related substances" (I. Barford)	12/17/2019
	8.8.4	Added second bullet referring to Notice No. 2019-244 (L. Li)	1/8/2020
	8.5	Added second paragraph (P. Vernaudon)	1/15/2020
	3.3	Added third paragraph (C. Hasenauer)	1/15/2020
		Formatting changes (C. Hasenauer)	1/20/2020
	Definitions	Corrected EU regulation number to 696	1/30/2020
6.0	5.1	Added references to CDD 2015/863 and edited some of the wording	12/xx/2015
	5.2	Added the list of items that suppliers need to disclose if contain >0.1% SVHCs	
	5.5.2	Corrected error: increased by 5 dBA was decreased by 5 dBA	
	6.2	Added the list of items that suppliers need to disclose if contain >0.1% SVHCs	1
	7.5	Included the expectation that upon request suppliers will provide information to assist Kodak in	1
		meeting other REACH like regulations	
	8.6.4	Removed labelling requirement in China	
	Appendix C	Removed EU category under the CMR category.	
	Appendix G	Multiple updates of standards	
	3.6	Added food contact application as an example under special applications	1
	4.0	Updated Article definition	1
		Electrotechnical Products has been replaced by Electrical and Electronic Equipment (EEE) and the	
		definition has been updated.	
		Packaging removed 94/62/EC reference	
		Packaging-Related Product Component – replaced electrotechnical product with EEE	
	5.0	Renamed Section to Electrical and Electronic Equipment (EEE) Requirements from Electrotechnical	
		Product Requirements	
		5.1 Added exception to RoHS threshold requirements criteria	
		5.4 Added "including, but not limited to"	
		5.5 Deleted Composite Wood section	
		5.6 Updated Section Title and all reference of Electrotechnical Product with Electrical and	
		Electronic Equipment (EEE)	
		5.6.1 Removed "upon request"	
		5.6.6 Updated Section title to EEE Containing chemicals and definition	
	6.0	6.1 Replaced 'Electrotechnical' with "Electrical and Electronic Equipment"	
		6.2.3 Removed Waste from section title	
		6.4 Updated example replacing Directive with Regulation	
		6.6 Removed Composite Wood section	
5.0	7.0	7.2.1 Updated section title and added additional requirements	12/15/2014
		(VOCs, LogP _{ow} , Mineral oil)	

Rev.	Section	Change	Date
		7.3 Removed 1910.1200 OSHA reference. Added requirement that SDSs must be provided in	
		languages of all countries to which it is supplied.	
		7.6 Updated example replacing Directive with Regulation	
	8.0	8.6.1 Updated section title replacing 'Fee' with 'Reporting' and added recycled content	
		requirement	
		8.6.3.A Removed reference 94/62/EC	
		8.6.3.B Removed reference to 90/269/EC	
		8.6.3.C Removed reference to 2009/251/EC	
	Appendix A	Renamed Section to Electrical and Electronic Equipment (EEE) Requirements from Electrotechnical	
		Product Requirements and all references of Electrotechnical	
	Appendix B	Updated threshold levels adding 'as an impurity' and removing above 0.1% by weight (1000 ppm)	
		Added IARC 2B as a suspected carcinogen	
	Appendix C	Updated threshold levels adding 'as an impurity' and removing above 0.1% by weight (1000 ppm)	
		Added IARC 2B as a suspected carcinogen	
	Appendix D	Deleted Polyvinyl Chloride (PVC) and Polyvinylidene dichloride (PVDC)	
	Appendix G	Deleted EU/EFTA EN ISO 14121-1 Safety of Machinery, Risk Assessment Principles	
	3.1.3	3.1.3 Changed Conflict Minerals reporting requirement to "when requested"	1
	4.0	Definitions Updated examples to reflect current product portfolio	1
	5.0	5.1 Changed restricted material list to IEC 62474 Declarable substance groups and declarable	
	5.0	substances. Replaced expanded CAS listed to IEC 62474 Reference substances	
		5.2 Changed section title	
		5.6.2 Deleted guardband requirement (will continue to be in PRD - Product Requirements	
		Documents)	
		5.6.3 Revised Sound requirements for large operating systems. Deleted requirement for	
		office/home use.	
		5.6.4 Defined Energy Efficiency requirement to meet applicable regulatory levels	
		5.6.5 Added OEL requirement and requirement to quantify indoor air contaminants.	
		Deleted Plastics requirements	
		Deleted Battery requirements for individually packaged batteries sold as batteries.	
		Imbedded batteries must meet regulatory requirements	
	6.0	6.1 Changed restricted material list to IEC 62474 Declarable substance groups and declarable	
		substances. Replaced expanded CAS listed to IEC 62474 Reference substances	
		6.2 Changed section title	
		Deleted Plastics requirements	
4.0	8.0	8.2 Changed section title	12/17/2013
		8.4 Added FSC source as an alternative to meet paper requirements. Deleted specific recycle	
		requirements for different paper types.	
		8.6.2 Removed the consumer plastic bag requirement from "Requirements in the	
		United States"	
		Deleted "Separable Packaging" and "Requirements in Japan" requirements	
	Appendix A	Replaced Tables 1 and 2 with web address to IEC 62474 Declarable substance groups and declarable	
		substances. Use IEC 62474 Reference substances to identify expanded chemical lists with available	
		Chemical Abstract Services (CAS) numbers	
	Appendix B	Replaced Table B1 with web address to IEC 62474 Declarable substance groups and declarable	
		substances. Use IEC 62474 Reference substances to identify expanded chemical lists with available	
		Chemical Abstract Services (CAS) numbers	
		Changed Reportable Application for IEC 62474 to All, since articles are often in scope of	
	Electrotechnical applications		
	Changed CMR definition to include GHS Category 2, and expanded scope to include "suspected to be		
		carcinogens"	
		Changed Reportable Application to "all" for all Categories except Potent Sensitizers	
		Combined Appendix B into one table	

Rev.	Section	Change	Date
	Appendix C	Changed CMR definition to include GHS Category 2, and expanded scope to include "suspected to be	
		carcinogens"	
	Appendix D	Added Asbestos, Dioctyltin (DOT) compounds, Dimethyl fumarate, Formaldehyde, Methyl Bromide	
		and Tri-substituted organostannic compounds	
	Appendix E	Deleted all CAS lists that do not further define materials in Appendix C or D. Appendix A and B now	
		use IEC 62474 Reference substances to identify expanded chemical lists with available Chemical	
		Abstract Services (CAS) numbers	
	Appendix G	New appendix to identify Product Safety and EMC References. [Tables after the new Appendix G were	
		renamed to reflect new appendix letter, but content was unchanged.]	
	Appendix H	Removed references to "marking of plastic bags for consumers"	
	3.1.3	3.1.3 Changed "Conflict Metals Requirement" to "Conflict Minerals". Added annual reporting	
		requirement needed to meet new US regulations	
	4.0	"Conflict Metals" changed to "Conflict Minerals". Clarified that "Conflict Minerals" includes all	
		sources of tantalum, tin, tungsten and gold (previously stated "Conflict Metals" only included material	
		sourced from suppliers determined to be financing conflict.	
		Electrotechnical Products – added examples of finished Electrotechnical Products	
	5.0	5.7.1 Added manual/guide requirements to Product Safety	
		5.7.9 Added "Additional Labeling" requirement with example for refrigerants	
	8.0	8.4 Removed the Forest Certification Schemes option for paper packaging	
		8.7.2 Removed the US regulatory RPPC SPI Resin Identification marking requirement as Kodak	
		requires markings for all plastic (including RPPC)for all countries (see Section 8.3 "Plastic Packaging")	
3.0	Appendix A	BFR/CFR - added lower requirement for printed wiring board laminate and separated CFR from BFR	12/18/2012
	Table 1	(now each have separate entries)	
		DBT, DOT, Dimethylfumarate, PCT, Short-chained Chlorinated Paraffins, Trisubstituted Organostannic	
		Compounds - changed threshold from "% in homogeneous material" to "% in product"	
		HBCDD - added separate entry (thus removing from BFR entry)	
		PVC/PVDC – changed threshold to 0.1% total chlorine content by weight (previously was intentionally	
		added)	
		Removed "Conflict Metals" as reporting requirement is already listed in Supplier Responsibility	
		(Section 3)	
		Cadmium in batteries - increased threshold from 5ppm to 10ppm	
	Table 2	Mercury in batteries - expanded "no intentional addition" to all battery types (was only button cells),	
		and reduced unintentional addition threshold to 1ppm (from 1000 ppm)	
		PVC in batteries – specified restriction is for dry cell batteries, and changed threshold to 0.1% by	
		weight in homogeneous material from intentionally added	
		Removed "Conflict Metals" as reporting requirement is already listed in Supplier Responsibility	
		(Section 3)	
	Appendix B	BFR – changed "Reportable Application" to All	
		CFR - removed restriction in articles (as not applicable)	
		HBCDD - added separate entry (thus removing from BFR entry)	
		Perchlorate – added requirement	
		Removed "Conflict Metals" as reporting requirement is already listed in Supplier Responsibility	
		(Section 3)	
		Consumer products was added for all Reportable Applications	
	Appendix C	Removed "Conflict Metals" as reporting requirement is already listed in Supplier Responsibility	
		(Section 3)	
	Appendix E BFR, CFR and HBCDD – separated into three tables to match JIG		
		PVC - added PVC Copolymers	
		Removed "Conflict Metals" as reporting requirement is already listed in Supplier Responsibility	
		(Section 3)	
<u> </u>		Consumer products was added for all Reportable Applications	

Rev.	Section	Change	Date
	Appendix A	Changed "Flame Retardant" to "Brominated Flame Retardant/Chlorinated Flame Retardant" to be	
	and B	consistent with non-English translations. Non-English translations will remain as version 2.0. Only	
		English will be version 2.01.	
	1.0	Added website address where current EKSP-2285 can be found	
	3.0	Reformatted existing requirements into 3.1.1 and 3.1.2	
		3.1.3 Added Conflict Metals requirements	
		3.2 Informed that suppliers can now get DF directly from Kodak website	
		3.3 Added "Third Tier"	
	4.0	Articles - Added printed materials and flexographic printing plates to list of examples	
		Added Conflict Metals	
		Added Homogeneous Material	
		Packaging Related Product Component - Added "(such as label)" example	
2.01	5.0	5.1 Described Appendix A is now divided into Table 1 (Electrotechnical products, except	1/31/2012
		Batteries) and Table 2 (Batteries)	_, -,,
		Switched order to put Single Resin after Manual Separation and added definition for recyclable plastic	
		Switched order to put Manual Separation before Single Resin and added exceptions for Manual	
		Separation	
		5.5.1 Removed prohibition of nickel cadmium secondary batteries because cadmium threshold in	
		Appendix A addresses the regulatory requirement	
		Added battery weight to the list of information required	
		5.7 Added presses, plate setters and plate processors as additional examples of Finished	
		Electrotechnical Products	
		5.7.1 Clarified products must comply with applicable IEC Safety standards when there are no	
		country specific requirements	
		5.7.2 Clarified products must comply with applicable IEC EMC standards when there are no	
		country specific requirements	
		Added Guardband requirement	
		5.7.3 Added test procedures for measuring sound pressure levels	
		5.7.4B Clarified External Power Supply requirement applies to Single Voltage Class A products	
		5.7.6 Added Emissions from Products that use Consumables requirement	
		5.7.7 Added Paper and Printer Materials requirement	
		5.7.8 Added SDS requirement	
2	6.0	6.2.2 Added California State Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)	11/11/2011
-	0.0	requirement	11/11/2011
		6.2.3 Moved Hazardous Wastes from Appendix B to Section 6.0. Corrected the table which	
		should be used as basis for determination of hazardous components and added TCLP requirement	
		6.2.4 Revised definition of nanomaterials, added requirement to provide Kodak with size	
		distribution data for nanomaterials as well as other data that is available	
		6.6.1 Added labels to Exception list	
		6.6.2 & 6.6.3 Switched order of Single Resin and Manual Separation	
		6.9. Added Supplier requirement to provide emissions test or data if requested	
	7.0	7.2.1 Moved Hazardous Wastes from Appendix C to Section 7.0. Corrected the table which	1
	7.0	should be used to determine hazardous components and added requirement to provide flashpoint,	
		pH and reactivity evaluation	
		7.2.2 Revised definition of nanomaterials, added requirement to provide Kodak with size	
		distribution data for nanomaterials as well as other data that is available	
		7.2.3 Added Conflict Metals requirement	
		7.3 Added GHS requirement for applicable SDSs	
		7.4 Added GHS requirement for applicable 3D3S 7.4 Added EINECS to Global Inventory Status list	
		7.5 Changed "Only Rep" to "Only Representative	
ì		7.8 Added requirement to provide emissions test or data if requested	
ì		·	
		7.9 Added requirement for Paper and Printed Material	<u> </u>

Rev.	Section	Change	Date
	8.0	8.2.2 Removed "Foamed Plastic" requirement as it is covered in 8.7.6	
2	Appendix A	Separated Appendix A into two tables, Table 1 for electrotechnical products except for batteries)	
		and Table 2 for batteries (including imbedded batteries)	
		Changed "Brominated Flame Requirements" to "Flame Retardants" and added chlorinated	
	Table 1	flame retardants in list of included chemicals	
		Added "of cadmium in" homogeneous materials to Cadmium/Cadmium Compounds	
		Added "of chromium in" homogeneous materials to Chromium/Chromium Compounds	
		Deleted DecaDBE because it is included in PBDE category	
		Added "of tin in" homogeneous materials to DBT, DOT, Tri-substituted Organostannic	
		Compounds and TBTO	
		Added "of lead in" homogeneous materials to Lead/Lead Compounds	
		Added "of mercury in" homogeneous materials to Mercury/Mercury Compounds	
		Added "Intentionally Added" to Ozone Depleting Substances Threshold Level	
		Added "or known to be present" requirement to PFOS/PFOS related substance	
		Changed Threshold Level to include "Intentionally added" and added footnote #4 to both PBDEs	
		and to Tri-substituted Organostannic Compounds	
		Changed PCT Threshold Level to .005% by weight	
		Changed PVC/PVDC Threshold Level to "Intentionally added" and changed reportable	
		application to "All, except for wire insulation"	
		Changed Threshold Level for Short-Chained Chlorinated Paraffins from product level to	
		homogeneous level.	
		Added Conflict Metals requirement	
		Moved from Table 1 to Table 2: Battery requirements for Cadmium, Hexavalent Chromium,	
	Table 2	Lead, Mercury, PBB, PBDE, PVC/PVDC and Perchlorates for batteries	
		Removed prohibition of intentionally added lead	
		Added requirement for no intentional use of mercury in button cell batteries	
		Added Conflict Metals requirement	
	Appendix B	Added footnote #3 to all "or known to be present" threshold levels	
		Changed "Brominated Flame Requirements" to "Flame Retardants" and added chlorinated	
	Table 1	flame retardants in list of included chemicals, and change Threshold Level	
		Added "of tin" to Threshold Level for DBT and DOT	
		Added Threshold Level of "Intentionally added" for Ozone Depleting Substances	
		Changed DecaBDE requirement to intentionally added or known to be present	
		Changed PCT Threshold Level to .005% by weight	
		Added Conflict Metals requirement	
		Changed Reportable Application to "All" for PVC/PVDC Moved Hazardous Waste Materials from Table 2 to Section 6.2.2	
		Woved Hazardous Waste Materials from Table 2 to Section 6.2.2	
	Table 2		
	Appendix C	Added footnote #1 to all "or known to be present" threshold levels	
	, appendix c	Added Threshold Level of "Intentionally added" for Ozone Depleting Substances	
		Moved Hazardous Waste Materials from Table 2 to Section 7.2.1	
		Added Conflict Metals requirement	
2	Appendix D	Added DBT Compounds	11/11/20
_	pp cam b	Added Threshold Level of "Intentionally added" for Ozone Depleting Substances	11, 11, 20
		Changed Threshold Level for PVC/PVDC to "Intentionally added"	
	Appendix E	Changed "Brominated Flame Requirements" to "Flame Retardants" and added Chlorinated	
	Appendix	Flame Retardants chemicals to Flame Retardants Table	
		Added additional chromium compounds (CAS 49663-84-5 and CAS 11103-86-9), added PBB	
		material (CAS 13654-09-6)	
		Deleted Chlorinated polyethylene as not listed in JIG 4.0	
		Deleted enformated polyethyrene as not listed in the 4.0	

Rev.	Section	Change	Date
	All	Combined EKSP-1614 (Kodak HSE Specifications for Equipment), EKSP-1636 (Kodak HSE	
		Specifications for Articles/Chemical Products and EKSP-1594 (Kodak HSE Specifications for	
		Packaging) into one document. Combination included consolidation of similar HSE requirements	
		and rewording for clarity or grammatical changes	
		The term "Equipment" was changed to "Electrotechnical" to be consistent with JIG. There has	
		been no change in scope	
	5.0	5.4. Single Resin and Manual Separation requirements	
		Eliminated requirement to report some topics for all products, Kodak will instead ask for	
		information based upon our product use (see Section 3.6)	
		5.7.3. Reduced sound pressure levels for large professional operating systems from 80 to 77	
		and for private office systems or home use from 60 to 55	
		5.7.4. Removed external power supplies from the example of Energy Star categories	
		Added requirement for external power supplies	
		Reduced the power consumption from 1 to 0.5 for off-mode and from 2 to 0.5 for standby mode	
		if the product does not have a status display.	
		Added requirements that applied to products that did not fall under the scope of any of the	
		other requirements	
		Removed the heavy metal and PVC/PVDC requirements in the batteries section since Appendix	
		A identifies the restrictions	
		Added the requirement for removable coin button cell for consumer products	
2	6.0	6.0 Moved Hazardous Wastes from Section 6.0 to Appendix B	11/30/20
_	0.0	6.2 Moved SVHCs and Nanomaterial from Appendix B (Restricted materials) to Section 6.2	11/30/20
			11
		(Materials Requiring Declaration) 6.6. Updated Paper and Printed Materials requirement	
		6.7. Added Single Resin and Manual Separation requirements	
		6.9. Eliminated requirement to report some topics for all products, Kodak will instead ask	
	7.0	for information based upon our product use (see Section 3.6)	
	7.0	7.4. Added Turkey and Taiwan	
		7.7. Eliminated requirement to report some topics for all products, and instead Kodak will	
		ask for information based upon our product use (as per section 5.8)	
1	8.0	8.4. Updated requirement for paper-based packaging	11/10/20
		8.6. Added requirement for Separable Packaging	10
		8.7.3.A. Removed information about "essential requirements" which is already covered in	
		Article 9 of the European Parliament and Council Directive 94/62/EC	
	Appendix A	Replaced requirement column with reportable applications column	
		Modified the threshold for Lead/Lead Compounds to include 600ppm of total weight of product	
		in order to collect information that may trigger labeling requirements for consumer products	
		Removed line items for lead in surface coatings and lead in children's product	
		Modified the threshold for Lead in Batteries to include the restriction of intentionally added lead	
		Added, removed and or renamed the following Substance/Category names to be consistent with	
		JIG 101 Ed. 3.1	
		Combined ODS categories and modified threshold level	
		Replaced Tributyl Tin (TBT) and Triphenyl Tin (TPT) with Tri-substituted organostannic	
		compounds	
		Added DBT and DOT	
		Removed PFOA and PFOA salts	
		Removed Beryllium Oxide	
		Removed six specific phthalates because requirement to declare phthalates that are SVHCs is in	
		section 5.2 and there is no restriction for the other phthalates for non-children's products.	
		Included two lines for formaldehyde for two different reporting applications	
		Removed SVHCs from appendix because requirement is in section 5.2	

Rev.	Section	Change	Date
ilev.	Appendix B		Date
	Аррепаіх в	Replaced requirement column with reportable applications column	
		Due to changes driven by scope of reportable applications, specifically call out the following in	
		Table 1 rather than only included in Table 2 Categories: Asbestos, DBT, DOT, Dimethylfumarate,	
		Fluorinated Greenhouse Gases, Nickel, "Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-	
		dimethylethyl)", PCBs, PCTs, Polychlorinated naphthalenes, Radioactive Substances, Short	
		Chained Chlorinated Paraffins, Tri-substituted Organostannic Compounds, TBTO, Tris(aziridinyl)	
		phosphinoxide, Tris(2,3-dibromopropyl) phosphate	
		Moved SVHCs and Nanomaterial from Appendix B (Restricted materials) to Section 6.2	
		(Materials Requiring Declaration)	
		Moved Hazardous Waste Materials from Section 6.0 to Appendix B	
		Removed six specific phthalates because requirement to declare phthalates that are SVHCs is in	
		section 6.2 and there is no restriction for the other phthalates for non-children's products	
		Removed Bisphenol A as there are no prevalent uses in current product portfolio	
	Appendix C	Replaced requirement column with reportable applications	
		Deleted Table 1, as materials of concern are also included in Table 2 Categories in reportable	
		application scope	
		Added substances restricted by ANNEX XVII of REACH Regulation (EC) No 1907/2006	
		Moved Nanomaterial from Appendix C (restricted materials) to Section 7.2 (Materials Requiring	
		Declaration)	
		Moved Hazardous Waste Materials from Section 7.0 to Appendix C	
		Removed Bisphenol A as there are no prevalent uses in current product portfolio	
	Appendix D	Replaced requirement column with reportable applications column	1
		Removed PFOS and Brominated Flame Retardants (including PBBs and PBDEs) from Restricted	
		Materials as use in Packaging is no longer prevalent	
		Class II Ozone Depleting Substances threshold changed to 0 ppm from 1000 ppm	
		Added to Restricted Materials:	
		Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)	
		Polychlorinated biphenyls (PCBs) and specific substitutes	
		Polychlorinated napthalenes (PCNs) (more than 3 chlorine atoms)	
		Polychlorinated terphenyls (PCTs)	
1	Appendix E	Updated to be consistent with JIG 101 Ed 3.1	11/10/20
_	, ppendix E	opulated to be consistent with higher than 1.1	10