Conformance Assurance Procedure

(HYPERTECHNOLOGIE CIARA INC)

DOC.#: PR_HYP_QA032_Rev.017

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1. PURPOSE

The current procedure has been developed to ensure that products supplied by HYPERTECHNOLOGIE CIARA INC suppliers are identified, evaluated, and monitored following the E.U. RoHS Directive. This ensures they comply with the restrictions on hazardous substances in the product's materials, parts, and/or subassemblies.

Recognizing the importance of environmental protection and the use of hazardous substances, HYPERTECHNOLOGIE CIARA INC aims to provide its customers with the assurance that the technical documentation compiled for all its products, originating from HYPERTECHNOLOGIE CIARA INC and its suppliers, is controlled and meets the applicable substance restrictions.

2. SCOPE

All Information Technology hardware and equipment purchased from the suppliers, including P.C.s, monitors, All-in-One, and laptops, fall within the scope of this procedure.

HYPERTECHNOLOGIE CIARA INC collaborates closely with its suppliers to assess electrical and electronic products for compliance with international restrictions on hazardous substances.

3. DEFINITIONS

It is designated in the body of this document as needed.

4. RESPONSIBILITIES

The owner of the current procedure is the Purchasing department, as well as other significant departments, including Top Management and Product Management. The Quality Assurance department will assist the Purchasing team in implementing the required activities.

HYPERTECHNOLOGIE CIARA INC team shall continuously collaborate with suppliers to assess electrical and electronic products following international restrictions on hazardous substances.

5. DESCRIPTION

5.1. Requirements

HYPERTECHNOLOGIE CIARA INC team is committed to ensuring that the following issues, outlined in Section 5.2, are consistently adhered to and implemented by HYPERTECHNOLOGIE CIARA INC and its suppliers:

- **Documentation Accessibility:** Ensuring that information obtained from suppliers, especially materials, parts, and subassemblies used in the product, is consistently available and accessible to HYPERTECHNOLOGIE CIARA INC.

- **Compliance with E.U. RoHS Directive:** Guaranteeing strict adherence to the restrictions imposed by the E.U. RoHS Directive on substances in the product's materials, parts, and/or subassemblies.
- **Risk Evaluation:** Conducting thorough evaluations of suppliers, materials, components, and/or subassemblies for potential risks and assigning appropriate risk factors.
- **Documentation Fulfillment:** Providing all the necessary documentation required to meet the directives set forth by the E.U. RoHS.
- **Regular Document Updates:** Ensuring that supplier documentation is regularly updated, with the frequency of updates based on the assigned level of risk for the supplier, materials, parts, and/or subassemblies.

HYPERTECHNOLOGIE CIARA INC., due to the sector in which it operates, conducts an annual supplier risk assessment regardless of the risk level of its suppliers. The company aims to strengthen its relationships within the supply chain and align with market trends.

To support process performance and ensure compliance, the company has a robust "Corrective and Preventive Action Process" (CAPA Process) in place. This process is designed to monitor non-conformities. If there is a significant increase in Non-conformities (NCR), the Quality Assurance team reserves the right to re-assess the supplier as an ad hoc measure at any time."

5.2. Process Description

5.2.1. Purchasing and Supplier Evaluation Process

Information Management

HYPERTECHNOLOGIE CIARA INC Purchasing team is responsible for acquiring, recording, controlling, and maintaining information related to all purchased products and materials. This responsibility extends from supplier evaluation activities through product release to customers and encompasses after-sales and service-related activities.

Technical Documentation Review

The Purchasing team is accountable for requesting, receiving, and reviewing technical documents about product and material specifications, test reports, conformity declarations, and other contractual, technical documents. This process follows the guidelines in Section 9, Appendix II and III.

Purchase orders issued by the Purchasing team must include a note requesting suppliers to provide supporting test reports and declarations upon order receipt. The Purchasing team reviews these documents before products are shipped from the supplier's facility to HYPERTECHNOLOGIE CIARA INC.

Information Exchange with Suppliers

Suppliers must provide HYPERTECHNOLOGIE CIARA INC with comprehensive product information for all supplied items. Ciara must also access this information internally and communicate with external stakeholders.

Material Test Reports and Declarations

HYPERTECHNOLOGIE CIARA INC ensures that suppliers issue material test reports or declaration sheets of conformity to substantiate compliance with hazardous material regulations. Supplier declarations must align with restricted substance content specifications for the specified Material, part, or sub-assembly, adhering to appropriate levels and exemptions.

Document Evaluation

HYPERTECHNOLOGIE CIARA INC evaluates the source and content of each received document to determine its alignment with specified substance restrictions. Evaluation factors include document origin, contact information, responsibility of the signatory, and date. This evaluation informs the inclusion of documents in the technical documentation; adequate quality and trustworthiness are prerequisites for inclusion.

Handling Insufficient Documents

If a document is deemed insufficient in quality or trustworthiness, HYPERTECHNOLOGIE CIARA INC shall decide on appropriate actions. Possible actions may include requesting additional information from the supplier, imposing penalties, or contract termination, depending on the severity of the issue.

Quality Control

HYPERTECHNOLOGIE CIARA INC conducts first-article and incoming inspections to ensure product quality and verify the information provided in test reports or certificates. These inspections must align with technical requirements and references stipulated in purchase orders or supplier agreements.

Recording Anomalies

Any anomalies discovered during inspections and verifications of purchased items are recorded and communicated to Purchasing and Product Management for further actions with suppliers.

Non-Conformity Management

HYPERTECHNOLOGIE CIARA INC's Quality Assurance team maintains records of non-conformities, and the Purchasing team is responsible for following up on corrective measures with suppliers.

Supplier Corrective Action

In the event of non-conformities or the need for corrective action concerning supplier parts or products, the supplier must provide an action plan outlining steps and activities for addressing existing or potential failures. Failure to take necessary corrective action within a reasonable timeframe may lead to removing the supplier from the HYPERTECHNOLOGIE CIARA INC Approved Vendors List.

Quality and Environmental Management Certification

HYPERTECHNOLOGIE CIARA INC holds certification in the Quality and Environmental Management System (QEMS) compliant with the ISO 14001:2015 Standard. The Risk Management and Supplier Evaluation

processes are overseen by the Quality Assurance team in collaboration with the Purchasing department (see Appendix III).

Supplier Audits

Quality Assurance, as the primary department responsible for the Supplier Evaluation Process, conducts on-site or remote audits to assess supplier performance through supplied products or services. To facilitate continuous improvement, audit results are communicated to relevant parties, including the supplier. The entire evaluation process follows the External Provider Evaluation Procedure.

Pre-Audit Assessment

To aid in the evaluation process, informal visits or surveys of supplier facilities may be conducted at any time before on-site or remote audits. Top Management, Purchasing, or a designated representative of the Quality Assurance team can perform this assessment.

Evaluations and audits aim to verify the supplier's ability to provide necessary documents, records, and procedures related to the quality management system. This includes inspection processes across all stages of product realization, supporting analyses and certificates, and existing methods for controlling, storing, and issuing materials or components supplied to HYPERTECHNOLOGIE CIARA INC.

Supplier Performance Measurement

Supplier performance evaluations will be conducted by the Purchasing team, with support from the Quality and Efficiency department. Inspection records, including successful and non-conforming items, will be thoroughly assessed for each supplier and product. The resultant reports will be communicated to all relevant parties, including the supplier, if necessary.

5.2.2. Risk Assessment Implementation

The Product Management and Engineering departments will perform a Risk Assessment of supplied products, comparing the test results with supplier reports. This ensures that the performance and quality of materials, products, and sub-assemblies are continuously assessed and monitored for impacts (Appendix III and IV).

Technical Document Requirements

The types of technical documents needed for materials, parts, and/or subassemblies are determined through a risk assessment performed by the Purchasing team. This assessment considers:

a) The probability and impact level of restricted substances in materials, parts, or subassemblies.
b) The trustworthiness of the supplier.

5.2.3. Purchasing and Supplier Evaluation Process

Risk Assessment Criteria

Risk factors or elements are defined based on the requirements of EPEAT or HYPERTECHNOLOGIE CIARA INC quality management systems. These criteria are detailed in the risk assessment tables provided in Appendix IV. The risk levels for the presence of all listed substances in section 6 of this document are uniformly considered.

Terminology Clarification

In the context of this process, terms related to risk are defined as follows:

- **Risk Probability:** This assesses the likelihood of a risk occurring.
- **Risk Level** estimates the potential losses or impact associated with an identified risk.

Calculation of Risk Values

To determine "Supplier Risk Evaluation vs. EPEAT requirements," the Risk Values are computed by multiplying the existing risk probability by the impact level of each risk.

For instance, to assess the presence of non-ROHS materials among supplied products, if the probability is assigned a value of (1) and the impact level of this risk is (4) on the product, the supplier's risk score is calculated as (4).

Scoring Methodology

In the supplier risk assessment, probability and impact level scores range from (1), denoting the lowest, to (5), indicating the highest. Refer to the following risk matrix for a clearer understanding of the ratings:

5.2.3 - Risk Matrix

ProbabilityRating	5 – Very High	5	10	15	20	25
	4 – High	4	8	12	16	20
	3 – Moderate	3	6	9	12	15
	2 – Low	2	4	6	8	10
	1 – Very Low	1	2	3	4	5
		1	2	3	4	5
		Very Low	Low	Moderate	High	Very High
		Gravity Rating				

Strategy:

To Accept

To Mitigate

To Avoid

Note: The associated risk is acceptable if the final value is up to 5. However, the HYPERTECHNOLOGIE CIARA INC team should evaluate and monitor the supplier's materials or products according to the process defined in Appendix II. If the final risk value falls within the range of (6) to (12), a risk mitigation or response plan should be established to control the risk factor's impact better. If the risk value

exceeds 15, HYPERTECHNOLOGIE CIARA INC should take immediate action to avoid this high-risk scenario. A response or risk avoidance plan should be defined and urgently implemented as a high-priority measure.

Assessment of Added Materials

In the assessment process, materials added during production are also considered. For instance, when evaluating the likelihood of restricted substances being present (as described in item a), HYPERTECHNOLOGIE CIARA INC may exercise technical judgment, recognizing that certain substances are improbable in specific materials (e.g., organic substances in metals).

Transparency and Documentation

Technical judgment relies on information in the internal team's database and can be shared with stakeholders or auditors upon request. Comprehensive records and documents will be maintained for all products and will be accessible to both internal and external interested parties.

Information Sharing

Documents from the electrical/electronic industry review or materials/part investigations related to electrical/electronic products will be accessible and shared with the Quality Control, Quality and Efficiency, Sales, Operations, and Service departments.

Trustworthiness Assessment of Suppliers

In the evaluation of Supplier trustworthiness (as outlined in the preceding item b), HYPERTECHNOLOGIE CIARA INC employs the following criteria:

a) Historical experience with the supplier organization, if applicable.
b) Results from previous supplier inspections or audits.

5.2.4. Collected Information

Purchasing Team Responsibilities

The Purchasing team, while reviewing Supplier-collected information, is responsible for ensuring that products conform to content and material specifications as stated in supporting certificates and declarations. The substances used must follow the specified requirements.

HYPERTECHNOLOGIE CIARA INC is committed to maintaining comprehensive reports and records associated with purchased products. Suppliers should consistently issue and update these records, aligning with the latest revisions of standards or normative references relevant to components and the requirements outlined in IEEE 1680.1.

Furthermore, HYPERTECHNOLOGIE CIARA INC must verify that the relevant reports and technical documents meet the requirements detailed in purchase orders. Additionally, HYPERTECHNOLOGIE CIARA INC is responsible for validating the accuracy and establishing maximum allowable levels for restricted substances in its products, subassemblies, parts, or materials.

Restricted Substances:

- Cadmium (Cd): < 100 ppm
- Lead (Pb): < 1000 ppm (0.01 %)
- Mercury (Hg): < 1000 ppm (0.1 %)
- Hexavalent Chromium: (Cr VI) < 1000 ppm (0.1 %)
- Polybrominated Biphenyls (PBB): < 1000 ppm (0.1 %)
- Polybrominated Diphenyl Ethers (PBDE): < 1000 ppm (0.1 %)
- Bis(2-Ethylhexyl) phtalates (DEHP) : < 1000 ppm (0.1 %)
- Benzyl butyl phthalate (BBP): < 1000 ppm (0.1 %)
- Dibutyl phthalate (DBP): < 1000 ppm (0.1 %)
- Diisobutyl phthalate (DIBP): < 1000 ppm (0.1 %)
- Dimethyl fumarate (DMF) <=0.1 mg/kg
- Toluene Adhesives or spray paints <=0.1%w/w
- Beryllium < 1000 ppm (0.1 %)
- Plastic parts above 25 grams shall not contain more than 1000 ppm chlorine or greaterthan 1000 ppm bromine at the homogenous level.

5.2.4.1. Compliance with Standards

HYPERTECHNOLOGIE CIARA INC ensures compliance with 4.1.5.2 by verifying that all plastic parts over 0.5 grams in all components do not contain more than 1000 ppm chlorine or greater than 1000 ppm bromine at the homogeneous level, following the requirements of 6.4 to 6.6.

Ciara implements the current conformance assurance procedure to fulfill the optional criteria of IEEE 1680.1:2018 requirements. Consequently, HYPERTECHNOLOGIE CIARA INC expects its suppliers to provide supporting documents conforming to the latest standards and normative references.

5.2.4.2. RoHS Compliance

Under this Process, HYPERTECHNOLOGIE CIARA INC accepts allowable RoHS exemptions, provided that the supplied products or components by the suppliers do not use any exempted Cadmium applications under the E.U. RoHS Directive in effect at the time of the declaration of conformance to the Standard.

Throughout the implementation of the current document, Ciara avoids or eliminates substances listed in EU REACH Annex XIV based on the E.U. Regulation (E.C.) No 1907/2006, REACH Annex XIV, authorization list[1]. Ciara also ensures that all articles in the product do not contain more than 0.1% weight by weight (w/w) of applicable substances included in EU REACH Annex XIV and IEC 62474[2]and the EU REACH Candidate List of SVHC[3].

[1] https://echa.europa.eu/guidance-documents/guidance-on-reach

[2] https://std.iec.ch/iec62474/iec62474.nsf/Index?open&q=202037

[3] https://echa.europa.eu/candidate-list-table

Following the above references, HYPERTECHNOLOGIE CIARA INC also ensures that the weight of all substances and their compounds does not exceed 0.1% (w/w) of the homogeneous level in all product articles.

5.2.4.3. Applicable Substances

To meet the 4.1.6.1 criterion on IEEE 1680, the applicable substances are those listed in the IEC 62474 declarable substance list, the EU REACH Annex XIV Authorization List, and the EU REACH Candidate List of SVHC. HYPERTECHNOLOGIE CIARA INC ensures that all suppliers receive a 'list of applicable substances' for their products following Sections 6.6 and 6.7. Note that this list may vary for each product as it is subject to change over time.

To meet criterion 4.1.6.2 of IEEE 1680.1, HYPERTECHNOLOGIE CIARA INC also ensures that the products do not contain applicable substances included in the EU REACH Candidate List of Substances of Very High Concern (SVHC) above 0.1% weight by weight (w/w) of valuable importance in all articles, excluding uses and levels allowable under the E.U. RoHS Directive and its amendments.

5.2.4.4. Documentation and Beryllium Considerations

All suppliers' supporting documents and declared substances are reviewed and compared to the latest revision of the EU REACH candidate list of SVHC and REACH Annex XIV according to the declarations or statements' issuance date. HYPERTECHNOLOGIE CIARA INC consolidates the received information from the suppliers and provides the final declaration to support the final assembled product after their verification. Any changes obtained from the suppliers related to their products will be maintained and compared against both lists to ensure the final product complies with the IEEE 1680.1 requirements and defined thresholds of both lists.

HYPERTECHNOLOGIE CIARA INC knows that the high thermal conductivities of Beryllium and Beryllium oxide composite "E-Materials" have led to their use in thermal management applications. Beryllium improves many physical properties when added as an alloying element to aluminum, copper (notably the alloy beryllium copper), iron, or nickel. In addition, motherboards and connectors often contain Beryllium.

Beryllium is a p-type dopant in III-V compound semiconductors. It is widely used in materials such as GaAs, AlGaAs, InGaAs, and InAlAs grown by molecular beam epitaxy (MBE). A cross-rolled beryllium sheet is an excellent structural support for printed circuit boards.

Beryllium or Beryllium application may be found in specific components shipped from HYPERTECHNOLOGIE CIARA INC suppliers. Therefore, HYPERTECHNOLOGIE CIARA INC, when validating the suppliers' declaration, ensures that this substance is restricted at the homogeneous level. Ciara considers the above-explained issues against this substance when performing the risk assessment on received components and declarations from suppliers. HYPERTECHNOLOGIE CIARA INC is regarded as a separate line of assessment for Beryllium in the global risk register.

5.2.4.5. Supplier Documentation Requirements

Suppliers related to the scope of supplied products under this document shall provide HYPERTECHNOLOGIE CIARA INC with one or a combination of the following documents:

a) **Supplier Declarations:** Confirming that the restricted substance content of the specified Material, part, or sub-assembly is within the permitted levels and identifying any exemptions that have been applied. The declaration statement can be communicated to HYPERTECHNOLOGIE CIARA INC via email, accompanying the shipped products, or any other means that could conform with relevant Union Harmonization Legislation. Ciara accepts suppliers' declaration statements within the email content as well.
b) **Contractual Agreements:** Signed contracts shall conform to the manufacturer's specifications for the maximum content of restricted substances in a material, part, or sub-assembly.
c) **Material Declarations:** Providing information on specific substance content and identifying any exemptions that have been applied. Material declarations shall be dated either less than two years old as of the date of receipt by HYPERTECHNOLOGIE CIARA INC or the suppliers or the date of first being placed on the market for that Material, part, or subassembly and updated when relevant changes are made to that Material, part, or subassembly, or the appropriate substance restrictions or applicable exemptions.
d) **Test Certificates:** Suppliers' test certificates, including analytical or empirical test results dated less than two years old as of the date of declaration or less than two years from when the Material, part, or subassembly is first placed on the market, and updated when relevant changes are made to the Material, part, or subassembly.
e) **Risk Assessment Records:** Performed by suppliers on products or Material. This information is required only from those suppliers with higher risk values. Suppose the risk value of certain factors based on HYPERTECHNOLOGIE CIARA INC's evaluation falls under the yellow or red zone (ref. to impact matrix). In that case, the supplier should provide Ciara with the risk mitigation or control plan and the required documents mentioned in the purchase order.

6. RISKS & OPPORTUNITIES

All related risks are treated in the context of the scope of the management system.

7. REFERENCES

IEEE Std 1680.1™-2018 - IEEE Standard for Environmental and Social Responsibility Assessment of Computers and Displays

PL_HYP_SC003_Supply Chain Responsibility Policy

Directive 2011/65/E.U. of the European Parliament

EN 50581:2012 Technical documentation for assessing electrical and electronic products with respect to the restriction of hazardous substances.

IEC 63000:2016 - IEC technical specification: Unrestricted environmental use of technical documentation on electrical and electronic products and systems.

IEC 62321 (all parts), determination of certain substances in electro-technical products

IEC 62474:2012, Material declaration for products of and for the electro-technical industry

European Union (E.U.) Directive 2015/863, known as RoHS 3

RoHS Guide: https://www.rohsguide.com/rohs3.htm

Among other applicable references that are contained in this document.

8. HISTORY OF CHANGES

REV	DATE	MODIFICATIONS	CREATED BY/ MODIFIED BY	APPROVED BY
000	01-09-2020	Creation	Roch B.	Mike M.
001	24-09-2020	First revision	Roch B.	Mike M.
002	21-10-2020	Risk Assessment flow, suppliers, and hazardous substances inserted to process	Roch B.	Mike M.
003	30-10-2020	Section 6 was created, H.S. was added, and the risk register added	Roch B.	Mike M.
004	13-11-2020	Sections 5.19. and 6.5. added	Roch B.	Mike M.
005	18-11-2020	Expanding the definition of risk in 5.19	Roch B.	
006	24-11-2020	Slight modification in 5.2.,	Roch B.	Mike M.
007	14-01-2021	Modification of collected information from suppliers based on criterion 4.1.1.1. IEEE 1680.1:2018	Roch B.	Mike M.
008	15-03-2021	Page. 8, second paragraph, modification of Collected information in line with criterion 4.1.2.1	Roch B.	Mike M.
009	04-04-2021	Added 4.1.6.1 and 4.1.6.2 requirements to section 6.	Roch B.	Mike M.
010	14-04-2021	Suppliers' declaration formats have been modified	Roch B.	Mike M.
011	03-06-2021	Appendix V added to the scope of 4.1.6.1 verification requirements	Ali. K.	Ali. K.
012	23-08-2021	Added details regarding 4.1.6.1 on the page.8	Ali. K.	Ali. K.
013	23-01-2023	Adding Monitors to the scope of the procedure and general revision	Ali. K.	Ali. K.
014	18-04-2023	Minor changes	Ali. K.	Ali. K.
015	09-05-2023	Minor changes/Typo corrections	Behdad M.	Ali. K.
016	12-09-2023	Laptops added to the scope	Anizio N.	Ali. K.
016a	27-09-2023	Under External Collaboration, Section 5.1	Anizio N.	Ali. K.
016b	18-10-2023	AIO added to the scope; Reference change for packaging materials and batteries on section 9.8.2; grammatical changes	Behdad M.	Ali. K.
016c	19-10-2023	Adding four heavy metals not intenationally added to packaging in Table 3 in Section 9.8.3	Behdad M.	Ali. K.
017	12-12-2023	General revision	Anizio N.	Ali K.

9. ANNEX

9.1. Appendix I - Examples of Material Data Declaration and Test Report

Declaration of Conformity

Dear Customer,

SAMSUNG certifies that below listed part numbers do not contain any exempted Cadmium applications under the EU RoHS Directive, 2011/65/EU, and its amendments on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Product Code#

MZ-V7S250B/AM

MZ-V7S500B/AM

MZ-V8P500B/AM

MZ-V7P512E

MZ-V7S1T0B/AM

MZ-V8P1T0B/AM

MZ-V7S2T0B/AM

MZ-V8P2T0B/AM

Nevertheless, SAMSUNG provides no declaration concerning non-compliance arising from those materials, parts, or components supplied or designated by the customer or any specification, design, or instruction provided by the customer.

Regards,

Signature: Kyungah Kim **Date: 2023-01-20**

Kyungah Kim

Environment Team

9.2. Appendix I - Examples of Material Data Declaration and Test Report

Declaration of Conformity

Dear Customer,

ASUS certifies that below listed part numbers do not contain any exempted Cadmium applications under the EU RoHS Directive, 2011/65/EU, and its amendments on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

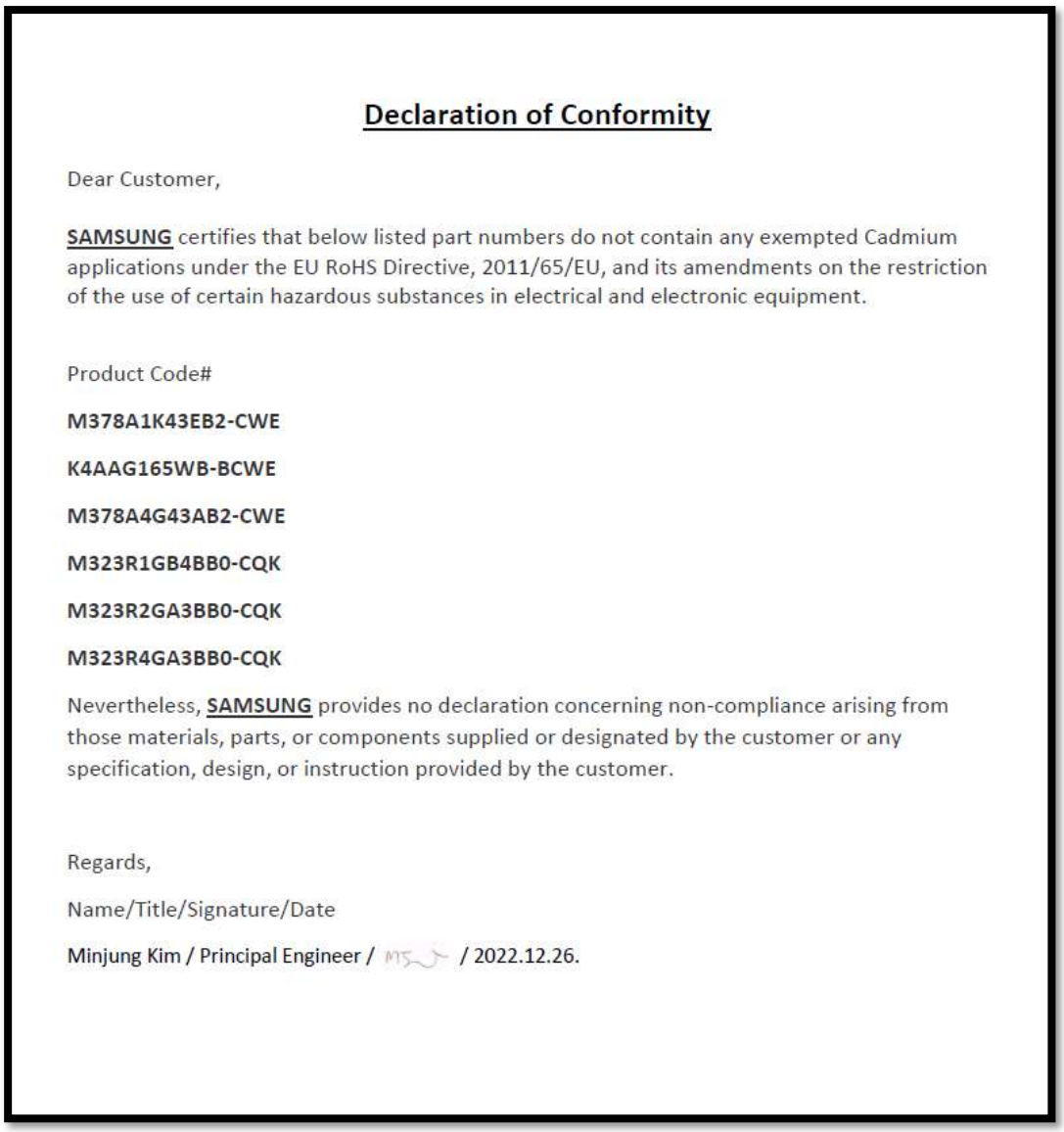
Product Code#
PRIME H670-PLUS D4 / 90MB18W0-M0AAY0
PRIME H610M-A D4-CSM / 90MB19P0-MVAAYC
Pro B660M-C D4-CSM / 90MB19B0-MVAAYC
PRO Q670M-C-CSM / 90MB19E0-M0AAYC

Nevertheless, ASUS provides no declaration with respect to noncompliance arising from those materials, parts or components supplied or designated by customer or any specification, design, or instruction provided by customer.

Regards
TS Wu
GreenASUS Management Representative
Signature

Date:2023/01/06

9.3. Appendix I - Examples of Material Data Declaration and Test Report



Declaration of Conformity

Dear Customer,

SAMSUNG certifies that below listed part numbers do not contain any exempted Cadmium applications under the EU RoHS Directive, 2011/65/EU, and its amendments on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Product Code#

M378A1K43EB2-CWE

K4AAG165WB-BCWE

M378A4G43AB2-CWE

M323R1GB4BB0-CQK

M323R2GA3BB0-CQK

M323R4GA3BB0-CQK

Nevertheless, **SAMSUNG** provides no declaration concerning non-compliance arising from those materials, parts, or components supplied or designated by the customer or any specification, design, or instruction provided by the customer.

Regards,

Name/Title/Signature/Date

Minjung Kim / Principal Engineer / MS / 2022.12.26.

9.4. Appendix I - Examples of Material Data Declaration and Test Report

Western Digital.

November 14, 2022

Western Digital Technologies, Inc.
5601 Great Oaks Parkway
San Jose, CA 95112
1 (408) 717-6000

EU ROHS Certificate of Compliance

Description of the product	Please refer to the table from page 2 onwards
Product	Table of RoHS compliant products is provided on the following pages
Name and address of the manufacturer	Western Digital Technologies, Inc. 5601 Great Oaks Parkway, San Jose, CA 95119 1 (408) 717-6000
Name and address of the manufacturer's authorized representative operating in the EEA-area	Western Digital PO Box 13379, Swords, Co Dublin, Ireland

This certificate of compliance is issued under the sole responsibility of the manufacturer. We affirm that the electronic products listed above are in compliance with the requirements of:

1. Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.
2. Directive (EU) 2015/863 of the European Parliament and of the Council of 31 March 2015 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Based on information provided by our suppliers, Western Digital designates the products listed below as RoHS Compliant for orders based on or after the date of this certificate.

RoHS compliant means that:
- Our supplier has confirmed the compliance status of the relevant products to us.
- We have implemented rigorous processes to confirm and document this.
- We perform material content testing where appropriate.

Banned Substances	RoHS proposed Maximum Concentration Value in ppm (1)
Cadmium (Cd)	100
Lead (Pb)	1000
Mercury (Hg)	1000
Hexavalent Chromium (Cr^{+6})	1000
Polybrominated biphenyls (PBB)	1000
Polybrominated diphenyl ethers (PBDE)	1000
Bis(2-ethylhexyl) phthalate (DEHP)	1000
Butyl benzyl phthalate (BBP)	1000
Dibutyl phthalate (DBP)	1000
Diisobutyl phthalate (DIBP)	1000

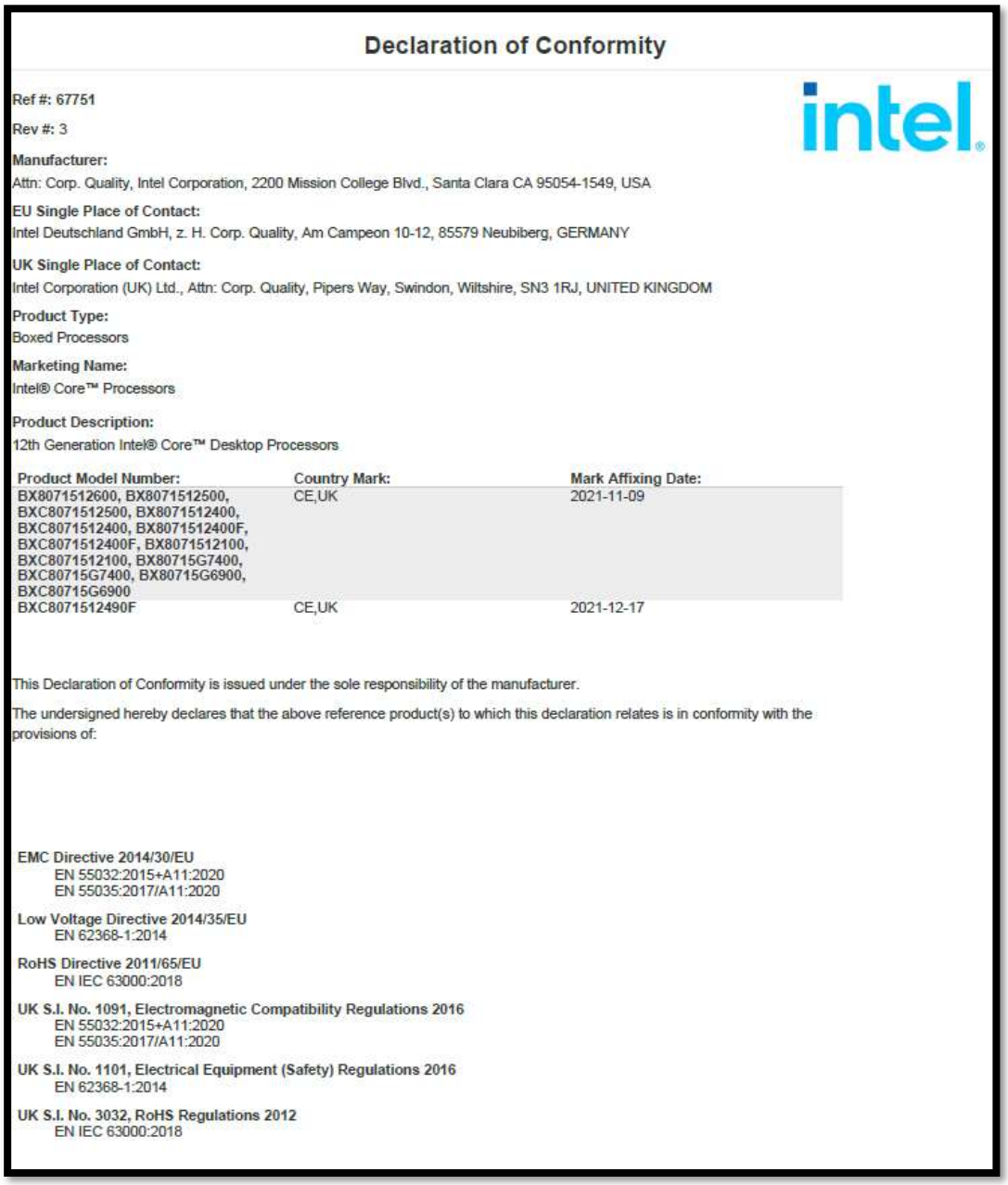
(1) Maximum limit does not apply to applications covered by RoHS exemptions.

Sudheer Chunduri

Sudheer Chunduri
Sr. Manager, Product Environmental Compliance
Western Digital

Western Digital Technologies, Inc.
www.westerndigital.com

9.5. Appendix I - Examples of Material Data Declaration and Test Report



Declaration of Conformity

Ref #: 67751

Rev #: 3

Manufacturer:
Attn: Corp. Quality, Intel Corporation, 2200 Mission College Blvd., Santa Clara CA 95054-1549, USA

EU Single Place of Contact:
Intel Deutschland GmbH, z. H. Corp. Quality, Am Campeon 10-12, 85579 Neubiberg, GERMANY

UK Single Place of Contact:
Intel Corporation (UK) Ltd., Attn: Corp. Quality, Pipers Way, Swindon, Wiltshire, SN3 1RJ, UNITED KINGDOM

Product Type:
Boxed Processors

Marketing Name:
Intel® Core™ Processors

Product Description:
12th Generation Intel® Core™ Desktop Processors

Product Model Number:	Country Mark:	Mark Affixing Date:
BX8071512600, BX8071512500, BXC8071512500, BX8071512400, BXC8071512400, BX8071512400F, BXC8071512400F, BX8071512100, BXC8071512100, BX80715G7400, BXC80715G7400, BX80715G6900, BXC80715G6900	CE,UK	2021-11-09
BXC8071512490F	CE,UK	2021-12-17

This Declaration of Conformity is issued under the sole responsibility of the manufacturer.

The undersigned hereby declares that the above reference product(s) to which this declaration relates is in conformity with the provisions of:

EMC Directive 2014/30/EU
EN 55032:2015+A11:2020
EN 55035:2017/A11:2020

Low Voltage Directive 2014/35/EU
EN 62368-1:2014

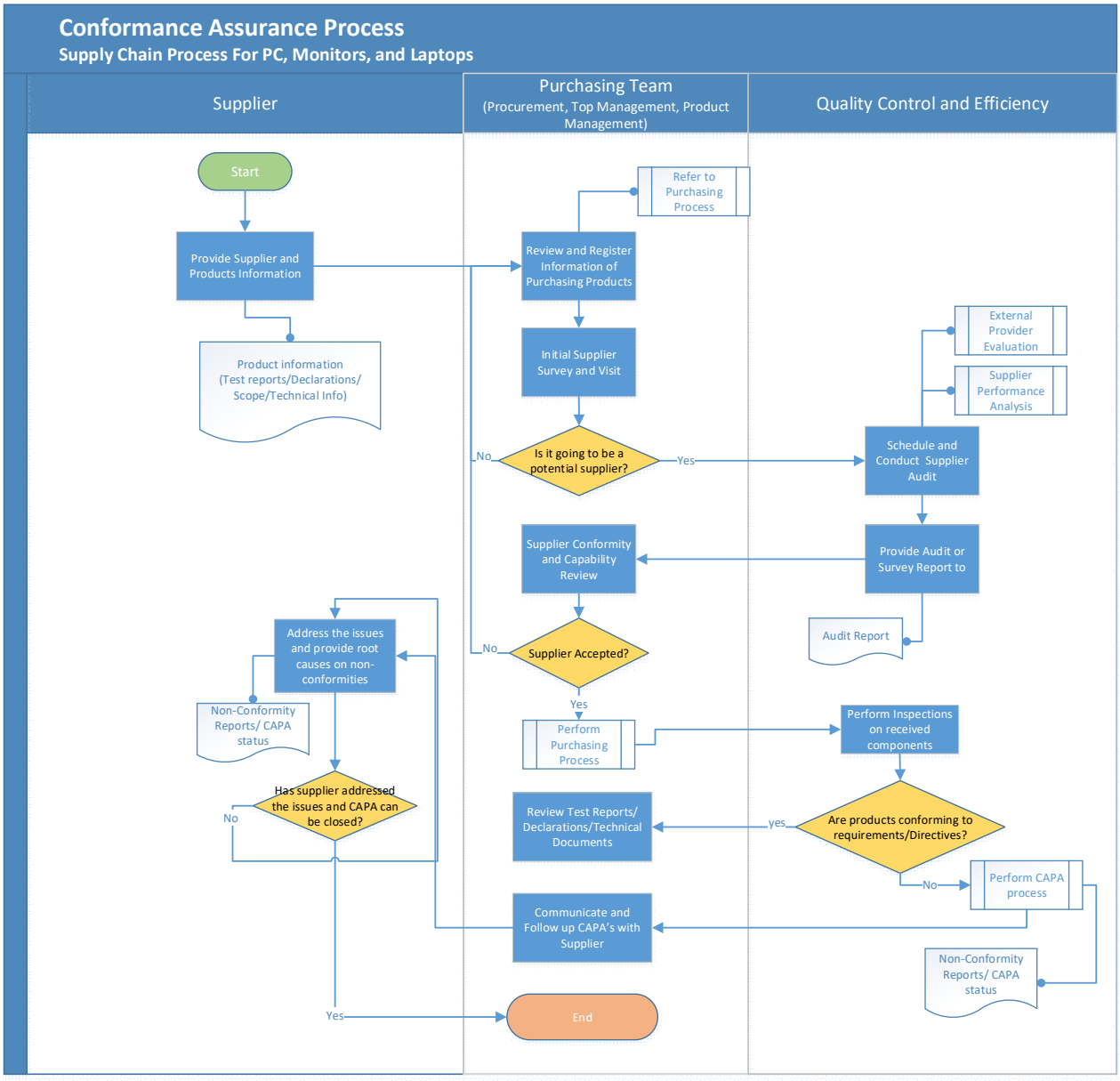
RoHS Directive 2011/65/EU
EN IEC 63000:2018

UK S.I. No. 1091, Electromagnetic Compatibility Regulations 2016
EN 55032:2015+A11:2020
EN 55035:2017/A11:2020

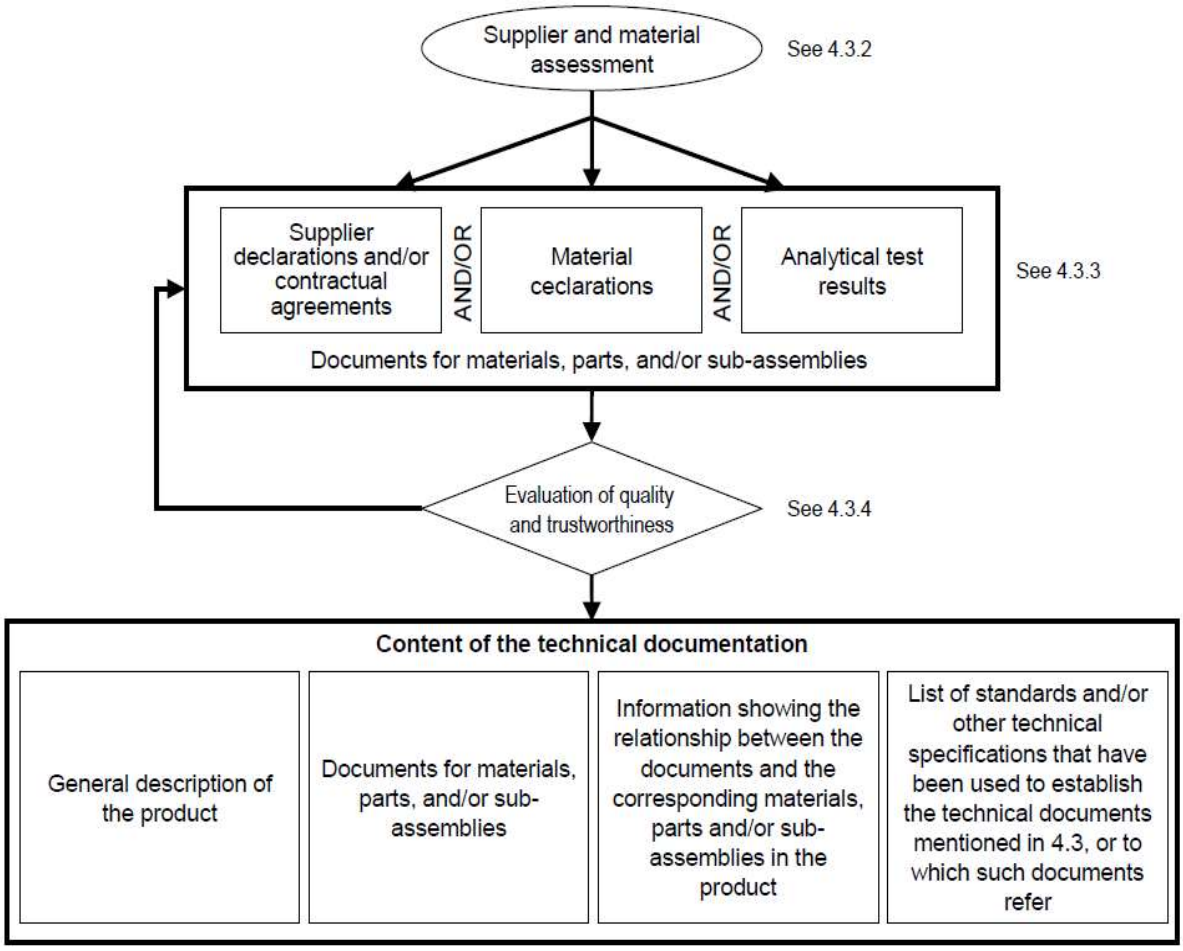
UK S.I. No. 1101, Electrical Equipment (Safety) Regulations 2016
EN 62368-1:2014

UK S.I. No. 3032, RoHS Regulations 2012
EN IEC 63000:2018

9.6. Appendix II – Conformance Assurance Process



9.7. Appendix III – Supplier Evaluation Flow



9.8. Appendix IV - Technical Standard Hazardous Substances Free (HSF)

OBJECTIVE

HYPERTECHNOLOGIE CIARA INC has developed Appendix IV - Technical Standard Hazardous Substances Free (HSF) to monitor and control chemical substances rigorously. This involves implementing prohibitive measures, establishing a phased-out schedule, and ensuring transparent disclosure of information concerning these substances. HYPERTECHNOLOGIE CIARA INC acknowledges its responsibility to uphold the following objectives for all HYPERTECHNOLOGIE CIARA INC products:

- **Hazardous Substance Prevention**: To prevent the use of hazardous substances in its products.
- **Legal Compliance**: To adhere to pertinent laws and regulations, such as IEEE 1680:2018 EPEAT.
- **Environmental Stewardship**: To actively contribute to the preservation of the global environment.
- **Ecosystem Impact Reduction**: To minimize the adverse impact on ecosystems.

SCOPE

Applicable HYPERTECHNOLOGIE CIARA INC Products:

This Technical Standard applies to HYPERTECHNOLOGIE CIARA INC products that are either designed, sold, or distributed directly by HYPERTECHNOLOGIE CIARA INC, as well as those bearing HYPERTECHNOLOGIE CIARA INC logos, even when the design or production of these products is subcontracted to other companies.

Applicable Modules, Parts, Sub-materials, and Materials

The scope of this Standard extends to modules, parts, sub-materials, and materials procured, manufactured, sold, or repaired by HYPERTECHNOLOGIE CIARA INC.

These components must meet the specified criteria outlined in this Technical Standard.

DEFINITION

- **Hazardous Substances** are those substances which, according to Ciara's assessment, have a significant adverse impact on both human health and the global environment. Depending on their impact, hazardous substances are categorized into Levels 1 to 3 for management within this Technical Standard.
- **Parts** refer to semi-finished products that serve specific functions, such as electronic components, mechanical parts, semiconductor elements, and printed circuit boards**.**
- **Plastics:** encompass materials and raw materials composed of synthetic high-molecular polymers. This term specifically encompasses manufactured high-molecular polymer-based articles, including resins, films, adhesives, adhesive tapes, injection-molded, and synthetic rubber-based products.
- **Packaging Materials:** denote materials utilized for the containment, protection, handling, delivery, and presentation of products from the manufacturer to end-users, consumers, or customers. All packaging materials and procedures comply with Section 4.7 of the IEEE 1680.2018 standard.
- **Management Level:** refers to the categorization of hazardous substances for management. Three levels are employed:

a. Level 1: Substances and/or their applications in this category are not intentionally added and must be immediately prohibited.

b. Level 2: Substances and their applications in this category should be disclosed to all relevant parties before a specified deadline and will be prohibited after that. On or after the Implementation Date specified in each table, substances in the respective table will be reclassified to Level 1. They must not be used in modules, parts, sub-materials, or materials.

c. Level 3: To monitor the use of hazardous substances in products, information on substances classified at this level should be disclosed (reportable) when they are intentionally used, or their concentration exceeds allowable levels in modules, parts, sub-materials, or materials. They shall be reclassified as Level 2 and phased out based on the availability of alternative components, new materials, or techniques that meet the intended application, as determined by Ciara.

- **Exemption:** pertains to the application of substances in modules, parts, sub-materials, or materials that are not regulated by law or excluded from the controlled substances outlined in this Technical Standard. This is typically due to the unavailability of suitable alternative components and materials in the market that can still satisfy the intended application.

MANAGEMENT STANDARDS FOR HAZARDOUS SUBSTANCES

List of Hazardous Substances:

9.8.1. Table 1 - List of Hazardous Substances

9.8.2. Table 2 - List of Restrictions of Hazardous Substances

9.8.3. Table 3 - The Restriction of Heavy Metals in Packaging Materials

9.8.4. Table 4 – Packaging Material List

9.8.5. Table 5 - REACH SVHC candidate list

9.8.1. Table 1 - List of Hazardous Substances

Hazardous Substances		Management Level			Exemption	Requirement for Test Report
		Level 1	Level 2	Level 3		
Heavy Metals	Cadmium (Cd) and cadmium compounds			✓	✓	✓
	Lead (Pb) and lead compounds			✓	✓	✓
	Mercury (Hg) and mercury compounds			✓	✓	✓
	Hexavalent chromium (Cr6+) compounds			✓	✓	✓
	Nickel (Ni) and nickel compounds		✓	✓	✓	
	Arsenic (As) and arsenic compounds		✓	✓	✓	
	Beryllium (Be) and beryllium compounds			✓	✓	
	Antimony (Sb) and antimony compounds		✓	✓	✓	
	Bismuth (Bi) and Bismuth compounds		✓			
	Cobalt (Co) and Cobalt compounds		✓			
Brominated organic compounds	Polybrominated biphenyls (PBBs)			✓	✓	✓
	Polybrominated diphenyl ethers (PBDEs)			✓	✓	✓
	Tetrabromobisphenol-A (TBBP-A)		✓	✓	✓	
	Hexabromocyclododecane (HBCDD)			✓	✓	
	Other brominated Flame Retardants (BFRs)		✓	✓	✓	
	Other brominated organic compounds		✓			
Chlorinated organic compounds	Polychlorinated biphenyls (PCBs), Polychlorinated naphthalenes (PCNs), Polychlorinated terphenyls (PCTs)			✓	✓	
	Chlorinated Paraffins (C.P.s)	✓	✓	✓	✓	
	Polyvinyl chloride (PVC) and PVC blends	✓	✓	✓	✓	
	Chlorinated Flame Retardants (CFRs)		✓	✓	✓	
	Hexachlorobutadiene (HCBD)			✓	✓	
	Tetrachlorobenzenes (TeCB)			✓	✓	
	Other chlorinated organic compounds		✓			
Phthalates	Bis(2-ethylhexyl) phthalate (DEHP)			✓	✓	✓
	Benzyl butyl phthalate (BBP)			✓	✓	✓
	Dibutyl phthalate (DBP)			✓	✓	✓
	Diisobutyl phthalate (DIBP)			✓	✓	✓
	Diisononyl phthalate (DINP), Diisodecyl phthalate (DIDP), Di-n-octyl Phthalate (DNOP)		✓	✓	✓	
	Other phthalates		✓			
Organic Tin compounds	Group A: Tributyl tin (TBTs) compounds, Triphenyl tin(TPTs) compounds, Dibutyl tin(DBT) compounds, Dioctyl tin(DOT)			✓	✓	

Table 1 List of Hazardous Substances – Continuation 2/2

Hazardous Substances		Management Level			Exemption	Requirement for Test Report
		Level 1	Level 2	Level 3		
Other compounds	Specific Azo compounds	✓				
	Asbestos	✓				
	Formaldehyde	✓				
	Expanded Polystyrene (EPS)	✓			✓	
	Ozone-depleting substances (ODS)	✓				
	Radioactive substances	✓				
	Halogenated diphenyl methanes	✓				
	Perfluorooctane sulfonates (PFOS)	✓			✓	
	Perfluorooctyl acid (PFOA) and its salts and one or a combination of PFOA-related substances	✓			✓	
	Bisphenol-A			✓		
	Fragrance substance (Musk xylene and Musk ketone)			✓		
	Surfactants (DTDMAC, DODMAC(DSDMAC) and DHTDMAC)			✓		
	Pentachlorophenol (PCP)	✓				
	Triclosan			✓		
	Dimethyl fumarate (DMF)	✓				
	Phenol,2-(2H-benzotriazol-2-yl)-4,6 bis(1,1-dimethylethyl)	✓				
	Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur hexafluoride (SF6)	✓				
	Polyaromatic Hydrocarbons (PAHs)	✓		✓		
	Selenium (Se) and Selenium compounds			✓		
	Perchlorates			✓		
	Red Phosphorous	✓		✓		
	Benzenamine, N-phenyl-, reaction products with styrene and 2,4,4-trimethyl pentene (BNST)	✓				
	Benzidine and benzidine dihydrochloride have the molecular formulas C12H12N2 and C12H12N2·2HCl, respectively.	✓				
	Tris(2-chloroethyl) phosphate (TCEP)	✓				
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	✓				
	Substance at nanoscale			✓		
	Benzene	✓				
	n-hexane	✓				
	Nonylphenol (N.P.), Nonylphenol ethoxylate (NPEO)	✓				
	Tris (2,3dibromopropyl) phosphate (TRIS)	✓				
	Tris-(aziridine)phosphine oxide (TEPA)	✓				
	Elemental Chlorine	✓				
	Substances included in Annex XIV of REACH (Authorisation List)	✓				

9.8.2. Table 2 - List of Restrictions of Hazardous Substances

Substance	Level	Targets	Implementation Date	Exemption	Allowable concentration
Cadmium (Cd) and cadmium compounds	1	All applications except those classified as "Exemption." Such as plastic materials (including rubbers), electronic parts (such as printed circuit boards and parts), the applications of preventing rust on surfaces of plating for the metal and alloy portion of the modules, or mechanical parts (such as screws, steel plates, heat-sink,etc.). Packaging materials refer to Section 9.8.4 Batteries refer to Section 9.8.1	Banned Immediately		Less than 100ppm
Lead (Pb) and lead compounds	1	All applications except those classified as "Exemption." Such as plastic materials (including rubbers), electronic parts (such as printed circuit boards and parts), the applications of preventing rust on surfaces of plating for the metal and alloy portion of the modules, or mechanical parts (such as screws, steel plates, heat-sink, etc.). Packaging materials refer to Section 9.8.4 Batteries refer to Section 9.8.1.	Banned Immediately	Refer to RoHS exemption	Less than 1000 ppm. Less than 100 ppm for plastics (including rubber), paints, and inks.
Mercury (Hg) and mercury compounds	1	All applications except those classified as "Exemption." Such as plastic materials (including rubbers), electronic parts (such as printed circuit boards and parts), the applications of preventing rust on surfaces of plating for the metal and alloy portion of the modules, or mechanical parts (such as screws, steel plates, heat-sink, etc.). Packaging materials refer to Section 9.8.4 Batteries refer to Section 9.8.1	Banned Immediately		Less than 1000 ppm
Hexavalent Chromium (Cr6+) compounds	1	All applications such as plastic materials (including rubbers), electronic parts (such as printed circuit board and parts), the applications of preventing rust on surfaces of plating for the metal, alloy portion of the modules, or mechanical parts (such as screws, steel plates, heat-sink, etc.) and leather. Packaging materials refer to Section 9.8.4	Banned Immediately		according to the following test procedure measuring standard value
Nickel (Ni) and Nickel compounds	1	All applications employ organic-nickel compounds (e.g., light stabilizers used in plastics). Metallic nickel or nickel alloy in the plating or coating application of the outer and exposed areas is intended to come into direct and prolonged contact with the skin of modules or parts.	Banned Immediately		
Nickel (Ni) and Nickel compounds	3	All applications except those classified in level 1, such as Modules and parts inside the products. Use non-environment-controlled substances to handle the surface on the exposed position of the product. Under normal usage, modules and parts are not directly exposed after assembly to the product.	Reportable		Less than 1000 ppm. If using metallic nickel or nickel alloy as the plating or coating application of the outer and exposed areas intended to come into direct and prolonged contact with the skin* of modules or parts, etc., the release rate should be less than 0.2 µg/cm2/week.
Arsenic (As) and Arsenic compounds	1	Wooden materials.	Banned Immediately		Not detected
	3	All applications (e.g., semiconductor materials)	Reportable		

Table 2 - List of Restrictions of Hazardous Substances – Continuation 2/8

Substance	Level	Targets	Implementation Date	Exemption	Allowable concentration
Beryllium (Be) and Beryllium compounds	1	All applications	Banned Immediately		Less than 1000 ppm
Antimony (Sb) and Antimony compounds	1	All outer and exposed areas of modules or parts	Banned Immediately	The glass's component sThe glass's component s	Less than 1000 ppm and Antimony Trioxide must be less than 1000 ppm.
	3	All applications except those classified in level 1, such as Modules and parts inside the products	Reportable		
Bismuth (Bi)and Bismuth compounds	3	All applications	Reportable		Less than 1000 ppm
Cobalt (Co)and Cobalt compounds	3	All applications	Reportable		Less than 1000 ppm
Polybrominated biphenyls (PBBs)	1	All applications (e.g., textile, flame retardants contained in plastics)	Banned Immediately		Less than 1000 ppm and Hexabromobiphenyl must not be detected. Must not be detected for textile
Polybrominated diphenyl ethers (PBDEs)	1	All applications	Banned Immediately		-Less than 1000 ppm. -Less than 500 ppm for the sum of the concentrations of Tetrabromodiphenyl ether, Pentabromodiphenyl ether, Hexabromodiphenyl ether, Heptabromodiphenyl ether, and Decabromodiphenyl ether when used in applications other than electrical and electronic product (e.g., leather, textile)
Tetrabromobisphenol-A (TBBP-A)	1	All applications except those classified as Level 3.	Banned Immediately		Less than 1000 ppm
	3	PCB, cable, and connector	Reportable		
Hexabromocyclododecane (HBCDD)	1	All applications	Banned Immediately		Less than 100 ppm
Other Brominated Flame Retardants (BFRs)	1	Following parts and applies to products: Mechanical plastic parts above 25 grams, I.C., CPU, Resistor, Inductor, packaging materials, ink, paint, battery, HDD	Banned Immediately		Less than 1000 ppm
	3	All applications except those classified as Level 1. (e.g., those for the flame retardants contained in printed circuit board)	Reportable		
Other brominated organic compounds	3	All applications except flame retardants	Reportable		Less than 1000 ppm

Table 2 - List of Restrictions of Hazardous Substances – Continuation 3/8

Substance	Level	Targets	Implementation Date	Exemption	Allowable concentration
Polychlorinatedd biphenyls (PCB), Polychlorinatedd naphthalenes (PCN), Polychlorinatedd terphenyls(PCT)	1	All applications (e.g., ones for capacitors, lubricants, insulating oils, transformers containing oil, and flame retardants contained in plastics)	Banned Immediately		Not detected
Chlorinated paraffin (CP)	1	All applications of SCCP(Short-chain chlorinated paraffin with the alkanes C10-C13, Cl = 48 wt% or more)	Banned Immediately		They were not detected for SCCP. Less than 1000 ppm for MCCP and LCCP
	2	All applications of MCCP(Medium-chain chlorinated paraffin with the alkanes C14-17)	2020/1/1		
	3	All applications of LCCP(Long-chain chlorinated paraffin with the alkanes over C18)	Reportable		
Polyvinyl chloride (PVC) and PVC blends	1	All applications (e.g., Vinyl ties, heat shrink tubes, packaging materials) except for cables.	Banned Immediately		Not detected
	3	Cables(wires)	Reportable		
Other Chlorinated Flame Retardants (CFRs)	1	Following parts and applies to products: Mechanical plastic parts above 25 grams, I.C., CPU, Resistor, Inductor, packaging materials, ink, paint, battery, HDD	Banned Immediately		Less than 1000 ppm
	3	All applications except those classified as Level 1.	Reportable		
Hexachlorobut audience (HCBD)	1	All applications	Banned Immediately		Not detected
Tetrachlorobe nzenes (TeCB)	1	All applications	Banned Immediately		Not detected
Other chlorinated organic compounds	3	All applications except flame retardants.	Reportable		Less than 1000 ppm
Bis(2-ethylhexyl)phthal ate (DEHP)	1	All applications	Banned Immediately		Less than 1000 ppm
Benzyl butyl phthalate (BBP)	1	All applications	Banned Immediately		Less than 1000 ppm
Dibutyl phthalate (DBP)	1	All applications	Banned Immediately		Less than 1000 ppm
Diisobutyl phthalate (DIBP)	1	All applications	Banned Immediately		Less than 1000 ppm

Table 2 - List of Restrictions of Hazardous Substances – Continuation 4/8

Substance	Level	Targets	Implementation Date	Exemption	Allowable concentration
Phthalates [including Diisononyl phthalate (DINP), Diisodecyl phthalate -- (DIDP), and Di-n-octyl Phthalate (DNOP)]	1	All applications except connectors and cables	Banned Immediately		The total concentration of Diisononyl phthalate (DINP), Diisodecyl phthalate (DIDP) and Di- n-octyl Phthalate (DNOP) are less than 1000 ppm
	3	Cables and Connectors	Reportable		
Other phthalates	3	All applications	Reportable		Less than 1000 ppm
Organic tin compounds [Group A: Tributyl tin (TBTs) compounds, Triphenyl tin(TPTs) compounds, Dibutyl tin(DBT) compounds, Dioctyl tin(DOT) compounds and Tributyl tin Oxide(TBTO) compounds]	1	All applications (e.g. those for paints, inks, preservatives, andfungicides)	Banned Immediately		Not detected
Other organic tin compounds [Organic tin compounds other than Group A]	3	All applications (e.g., environmentally friendly flame retardant	Reportable		Less than 1000 ppm
Specific Azo compounds	1	All applications (e.g., leather, textiles, packaging materials, earphones, headphones)	Banned Immediately		Not detected
Asbestos	1	All applications	Banned Immediately		Not detected
Formaldehyde	1	Wooden Material, textiles, and leathers	Banned Immediately	Pallet	(1) Wooden Material (emissionn content): Not detected (2) Less than 75 ppm of textiles and leathers. (3) Less than 75 ppm of Level 3.
	3	All applications except those classified in level 1	Reportable		
EPS (Expanded Polystyrene)	1	All packing materials sold to South Korea	Banned Immediately		Not detected. Please refer to Section 9.8.4
	3	All applications except those classified as Level 1	Reportable		

Table 2 - List of Restrictions of Hazardous Substances – Continuation 5/8

Substance	Level	Targets	Implementation Date	Exemption	Allowable concentration
Ozone-depleting substances (ODS) [Chlorofluorocarbons (CFCs), Halon, Carbon tetrachloride (CCl4), 1,1,1 trichloroethane (C2H3Cl3), Bromochloromethane (CH2BrCl), Methyl bromide (CH3Br), Hydrochlorofluorocarbons (HCFCs) and Hydrobromofluorocarbons	1	All applications	Banned Immediately		Not detected
Radioactive substances [Uranium (U), Plutonium (Pu), Radon (Rn), Americium(Am), Thorium (Th), Cesium(Cs), Strontium (Sr)and other radioactive substances]	1	All applications	Banned Immediately		Not detected
Halogenated diphenyl methanes	1	All applications (e.g., ones for capacitors, lubricants, insulating oils, transformers containing oil)	Banned Immediately		Not detected
Perfluorooctane sulfonates (PFOS)	1	All applications (e.g., semiconductor materials, textiles, leathers) except those classified as “Exemption.”	Banned Immediately	Mist suppressants for nondecorative hard Chromium (VI) platingand wettingagents for use in controlled electroplating systems	(1) In preparations: Less than ten ppm. (2) In parts, components, or products: Less than 1000 ppm. (3) Textile or other coated materials: Less than 1 μg/m^2
Perfluorooctyl acid (PFOA) and its salts and one or a combination ofPFOA related substances	1	All applications except those classified at “Exemption” (e.g. Teflon, textiles, leathers).	Banned Immediately	In spare parts for EEE placed on the market before June1, 2014	(1) In pure substances and mixtures and parts, components, or products: Less than 25ppb (2) In textiles or coated materials: Less than 1.0 μg/m^2

Table 2 - List of Restrictions of Hazardous Substances – Continuation 6/8

Substance	Level	Targets	Implementation Date	Exemption	Allowable concentration
Bisphenol-A	3	All applications (e.g.epoxy resin, polycarbonate, and other plastics)	Reportable		Less than 50 ppm
Fragrance substance [Musk xyleneand Musk ketone]	3	All applications (e.g., essence)	Reportable		Less than 500 ppm for Musk xylene and Musk ketone
Surfactants [DTDMAC, DODMAC (DSDMAC) and DHTDMAC]	3	All applications (e.g., softener)	Reportable		The total concentration of all surfactants (DTDMAC, DODMAC(DS DMAC), and DHTDMAC) is less than 1000 ppm
Pentachlorophenol (PCP)	1	All applications (e.g., preservative and pesticide).	Banned Immediately		Not detected
Triclosan	3	All applications (e.g., antibacterial and pesticide)	Reportable		Less than ten ppm
Dimethyl fumarat e(DMF)	1	All applications (e.g., preservatives)	Banned Immediately		Less than 0.1 ppm
(Phenol,2-(2H-benzotriazol-2-yl)-4,6 bis(1,1-dimethyl ethyl))	1	All applications	Banned Immediately		Not detected
Hydrofluoroca rbons (HFCs), perfluorocarb onsns (PFCs), Sulfur hexafluoride (SF6)	1	All applications	Banned Immediately		Not detected

Table 2 - List of Restrictions of Hazardous Substances – Continuation 7/8

Substance	Level	Targets	Implementation Date	Exemption	Allowable concentration
Polyaromatic Hydrocarbons (PAHs)	1	All outer and exposed areas of modules or parts	Banned Immediately		Less than one ppmof each PAH
	3	All applications except those classified in level 1, such as Modulesand parts inside the products	Reportable		
Selenium (Se) and Selenium compounds	3	All applications	Reportable		Less than 1000 ppm
Perchlorates	3	All applications	Reportable		Less than 0.006 ppm.
Red Phosphorous	1	A.C. power cord and plastic in contact with the conductor	Banned Immediately		Not detected
	3	All applications except those classified as Level 1.	Reportable		
Benzenamine, N-phenyl-, reaction products with styrene and 2,4,4-trimethyl pentene (BNST)	1	All applications	Banned Immediately		Not detected
Benzidine and benzidine dihydrochloride e has the molecular formulas C12H12N2 and C12H12N2•2 HCl, respectively	1	All applications	Banned Immediately		Not detected
Tris(2- chloroethyl) phosphate (TCEP)	1	All applications	Banned Immediately		Less than 1000 ppm
Tris(1,3- dichloro-2-propyl) phosphate (TDCPP)	1	All applications	Banned Immediately		Less than 1000 ppm
Substance at nanoscale	3	All application	Reportable		Less than 100 g
Benzene	1	All applications	Banned Immediately		Less than 1000 ppm
n-hexane	1	All applications	Banned Immediately		Less than 1000 ppm

Table 2 - List of Restrictions of Hazardous Substances – Continuation 8/8

Substance	Level	Targets	Implementation Date	Exemption	Allowable concentration
Nonylphenol (N.P.) and Nonylphenol ethoxylate (NPEO)	1	Leathers and textiles	Banned Immediately		Not detected
Tris (2,3 dibromo propyl) phosphate (TRIS)	1	Leathers	Banned Immediately		Not detected
Tris- (aziridine) phosphine oxide (TEPA)	1	Leathers	Banned Immediately		Not detected
Elemental Chlorine	1	As a bleaching agent to bleach virgin or recovered fibers used in paper-based product packaging	Banned Immediately		Not detected
Substances included in Annex XIV ofREACH ("Authorisationn List")	1	All applications	Banned Immediately		Less than 1000 ppm

9.8.3. Table 3 - The Restriction of Heavy Metals in Packaging Materials

Additional Rules for Heavy Metals in Packaging Materials

Packaging materials need to comply with the restriction in Section 9.8 and meet the requirements for four heavy metals in Table 3.

Substance	Level	Targets	Implementation Date	Exemption	Allowable concentration
Mercury (Hg), Cadmium (Cd), Lead(Pb), and (Cr6+)	1	All packaging materials (excluding applicationslisted as exemptions), including but not limited to the packagingmaterials listed in Table 3.	Banned Immediately	Packaging materials disposed or recycled/ reused by suppliers	These four metals (Mercury (Hg), Cadmium (Cd), Lead (Pb), and (Cr6+))must not be intentionally added to packaging. “Less than 100 ppm”is determined as an allowable total concentration of fourheavy metals contained in each part, ink, or paint that constitutes apackage.

9.8.4. Table 4 – Packaging Material List

No.	Packaging Materials	Description
1	Carton	Cartons are made from any material, such as mastercartons, sub-masters, and gift boxes.
2	Cushion	
3	Protection bag/sheet	Blister packs, EPE (Expanded Polyethylene), and those madefrom foamed plastic or non-woven fabric
4	Polybag	Such as PE (Polyethylene) bag and ESD bag
5	Envelope	Such as used for certificates or warranty card
6	Tray	Tray, vacuum-formed sponge
7	Film	Including protection films such as those used for LCDs
8	Model number label	
9	Separator/Spacer/Partition	Such as paper, EPE, and EPS (Expanded Polystyrene)
10	Printing ink	Such as used for printing on packaging materials
11	Tape	Such as used for closing cartons or polybags or fixing orprotecting a removable component.
12	Staple	Such as the applications for carton spiking
13	Label	Such as bar-code labels, safety marks, or warning signals stuckon the packaging component.
14	Joint	Carton joint
15	Binding band	Such as the P.P. (Polypropylene) band
16	Carrying handle	
17	Color sleeve	Such as printed paper or PET (Polyethylene Terephthalate)
18	Shrink film	

9.8.5. Table 5 - REACH SVHC candidate list

EU REACH Regulation

REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals) Regulation (E.C.) is a chemical regulatory framework of the European Union, and it entered into force on June 1, 2007. The control measures include registration, evaluation, authorization, information disclosure, etc. To comply with REACH, Ciara has the following approaches:

a. Ciara will continue to survey the modules, parts, sub-materials, and materials of products to see if they have a Substance of Very High Concern (SVHC). Please see Table 5 for the current latest candidate list maintained by Ciara.

	SUBSTANCE NAME	DESCRIPTION	E.C. NO.	CAS NO.
1	tris(2-methoxy ethoxy)vinylsilane		213-934-0	1067-53-4
2	S-(tricyclo(5.2.1.0'2,6)deca-3-en-8(or 9)-yl O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	X4261	401-850-9	255881-94-8
3	6,6'-di-tert-butyl-2,2'-methylene di-p-cresol		204-327-1	119-47-1
4	(±)-1,7,7-trimethyl-3-[(4-methyl phenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)			
5	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one		253-242-6	36861-47-9
6	(3E)-1,7,7-trimethyl-3-(4-methyl benzylidene)bicyclo[2.2.1]heptan-2-one			1782069-81-1
7	(1R,3E,4S)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one			95342-41-9
8	(1S,3E,4R)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one			852541-30-1
9	(1R,3Z,4S)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one			852541-21-0
10	(1R,4S)-1,7,7-trimethyl-3-(4-methyl benzylidene)bicyclo[2.2.1]heptan-2-one			741687-98-9
11	(1S,3Z,4R)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one			852541-25-4
12	Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerization, covering any individual isomers and/ or combinations thereof (PDDP)			
13	4-iso-dodecyl phenol			27459-10-5
14	Phenol, tetrapropylene-			57427-55-1
15	Phenol, 4-dodecyl, branched			210555-94-5

16	Phenol, (tetraphenyl) derivatives			74499-35-7
17	Phenol, 4-is dodecyl-			27147-75-7
18	Phenol, dodecyl-, branched		310-154-3	121158-58-5
19	Orthoboric acid, sodium salt (group)			
20	Boric acid, sodium salt		215-604-1	1333-73-9
21	Orthoboric acid, sodium salt		237-560-2	13840-56-7
22	boric acid (H3BO3), sodium salt, hydrate			25747-83-5
23	boric acid (H3BO3), sodium salt (1:1)			14890-53-0
24	Boric acid (H3BO3), disodium salt			22454-04-2
25	Trisodium orthoborate		238-253-6	14312-40-4
26	Medium-chain chlorinated paraffin (MCCP)	UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within therange from C14 to C17		
27	di-, tri- and tetrachlorotetradecane			
28	Alkanes, C14-17, chloro		287-477-0	85535-85-9
29	Tetradecane, chloro derivs.			198840-65-2
30	Alkanes, C14-16, chloro			1372804-76-6
31	glutaral		203-856-5	111-30-8
32	4,4'-(1-methylpropylidene)bisphenol		201-025-1	77-40-7
33	2-(4-tert-butyl benzyl)propionaldehyde and its stereoisomers			
34	2-(4-tert-butylbenzyl)propionaldehyde		201-289-8	80-54-6
35	(2S)-3-(4-tert-butylphenyl)-2-methylpropanal			75166-30-2
36	(2R)-3-(4-tert-butylphenyl)-2-methylpropanal			75166-31-3
37	2,2-bis(bromomethyl)propane-1,3-diol (BMP); 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA); 2,3-dibromo-1-propanol (2,3-DBPA)			
38	2,2-dimethylpropan-1-ol, tribromo derivative (TBNPA)		253-057-0	36483-57-5
39	3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA)			1522-92-5
40	2,2-bis(bromomethyl)propane-1,3-diol (BMP)		221-967-7	3296-90-0
41	2,3-dibromo-1-propanol (2,3-DBPA)		202-480-9	96-13-9

42	1,4-dioxane		204-661-8	123-91-1
43	Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety			
44	Dioctyltin dilaurate		222-883-3	3648-18-8
45	Stannane, dioctyl-, bis(coco acyloxy) derivs.		293-901-5	91648-39-4
46	dioctyltin dilaurate; stannane, dioctyl-, bis(coco acyloxy) derivs.			
47	Bis(2-(2-methoxyethoxy)ethyl)ether		205-594-7	143-24-8
48	Dibutylbis(pentane-2,4-dionato-O,O')tin		245-152-0	22673-19-4
49	Butyl 4-hydroxybenzoate		202-318-7	94-26-8
50	2-methylimidazole		211-765-7	693-98-1
51	1-vinylimidazole		214-012-0	1072-63-5
52	Perfluorobutane sulfonic acid (PFBS) and its salts			
53	Potassium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate		249-616-3	29420-49-3
54	1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonic acid		206-793-1	375-73-5
55	Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate		269-513-7	68259-10-9
56	bis(4-t-butylphenyl)iodonium perfluorobutanesulfonate		432-660-4	
57	tetrabutyl-phosphonium nonafluoro-butane-1-sulfonate		444-440-5	220689-12-3
58	morpholinium perfluorobutanesulfonate			503155-89-3
59	1-(4-butoxy-1-naphthalenyl)tetrahydrothiophenium 1,1,2,2,3,3,4,4,4- nonafluoro-1-butanesulfonate		468-770-4	
60	Triphenylsulfanium perfluorobutane sulfonate		478-340-8	144317-44-2
61	N,N,N-triethylethanaminium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulfonate			25628-08-4
62	magnesium perfluorobutanesulfonate			507453-86-3
63	lithium perfluorobutanesulfonate			131651-65-5
64	dimethyl(phenyl)sulfanium perfluorobutanesulfonate		452-310-4	220133-51-7
65	Diisohexyl phthalate		276-090-2	71850-09-4
66	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	ACETOCURE 97; GENOCURE*PMP; IGM 4817; IRGACURE 907; SPEEDCURE 97	400-600-6	71868-10-5

67	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	CG 25-369; IRGACURE 369; T.K. 11-319	404-360-3	119313-12-1
68	Tris(4-nonyl phenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)			
69	tris(nonylphenyl) phosphite		247-759-6	26523-78-4
70	tris (4-nonylphenol, branch) phosphorous acid ester			
71	Phenol, 4-nonyl-, phosphite (3:1)			3050-88-2
72	Phenol, p-isononyl-, phosphite (3:1)			31631-13-7
73	Phenol, p-sec-nonyl-, phosphite			106599-06-8
74	4-tert-butylphenol		202-679-0	98-54-4
75	2-methoxyethyl acetate		203-772-9	110-49-6
76	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts, and itsacyl halides	covering any of their isomers and combinations thereof		
77	potassium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionate		266-578-3	67118-55-2
78	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionyl fluoride		218-173-8	2062-98-8
79	ammonium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate			62037-80-3
80	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid		236-236-8	13252-13-6
81	Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, (-)-			75579-40-7
82	Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, (+)-			75579-39-4
83	Pyrene		204-927-3	129-00-0
84	Phenanthrene		201-581-5	85-01-8
85	Fluoranthene		205-912-4	206-44-0
86	Benzo[k]fluoranthene		205-916-6	207-08-9
87	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	AP-5	401-720-1	6807-17-6
88	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	3-benzylidene camphor; 3-BC	239-139-9	15087-24-8
89	Terphenyl, hydrogenated		262-967-7	61788-32-7
90	Octamethylcyclotetrasiloxane	D4	209-136-7	556-67-2
91	Lead		231-100-4	7439-92-1
92	Ethylenediamine	EDA	203-468-6	107-15-3
93	Dodecamethylcyclohexasiloxane	D6	208-762-8	540-97-6

94	Disodium octaborate		234-541-0	12008-41-2
95	Dicyclohexyl phthalate	DCHP	201-545-9	84-61-7
96	Decamethylcyclopentasiloxane	D5	208-764-9	541-02-6
97	Benzo[ghi]perylene		205-883-8	191-24-2
98	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride	trimellitic anhydride; TMA	209-008-0	552-30-7
99	Reaction products of 1,3,4-thiazolidine-2,5-dithizone, formaldehyde, and 4-heptyl phenol, branched and linear (RP-HP)	with ≥0.1% w/w 4-heptyl phenol, branched and linear (4-HPbl)		
100	Formaldehyde, reaction products with branched and linear heptyl phenol,carbon disulfide, and hydrazine		300-298-5	93925-00-9
101	Formaldehyde, reaction products with phenol heptyl derivs. and 1,3,4-thiazolidine-2,5-dithione			1471311-26-8
102	Chrysene		205-923-4	218-01-9
103	Cadmium nitrate		233-710-6	10325-94-7
104	Cadmium hydroxide		244-168-5	21041-95-2
105	Cadmium carbonate		208-168-9	513-78-0
106	Benz[a]anthracene		200-280-6	56-55-3
107	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene (“Dechlorane Plus”™)	covering any of its individual anti- and syn-isomers or any combination thereof		
108	(1S,2S,5R,6R,9S,10S,13R,14R)-1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.1^{6},^{9}.0^{2},^{13}.07,^{10}]octadeca-7,15-diene			135821-03-3
109	1,6,7,8,9,14,15,16,17,17,18,18-dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene		236-948-9	13560-89-9
110	(1S,2S,5S,6S,9R,10R,13R,14R)-1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.1^{6},^{9}.0^{2},^{13}.07,^{10}]octadeca-7,15-diene			135821-74-8
111	rel-(1R,4S,4aS,6aR,7R,10S,10aS,12aR)-1,2,3,4,7,8,9,10,13,13,14,14-dodecachloro-1,4,4a,5,6,6a,7,10,10a,11,12,12a-dodecahydro-1,4:7,10-dimethanodibenzo[a,e]cyclooctene			
112	rel-(1R,4S,4aS,6aS,7S,10R,10aR,12aR)-1,2,3,4,7,8,9,10,13,13,14,14-dodecachloro-1,4,4a,5,6,6a,7,10,10a,11,12,12a-dodecahydro-1,4:7,10-dimethanodibenzo[a,e]cyclooctene			
113	Perfluorohexane-1-sulphonic acid and its salts	PFHxS		
114	tridecafluorohexanesulphonic acid, a compound with 2,2'-iminodiethanol(1:1)		274-462-9	70225-16-0
115	ammonium perfluorohexane-1-sulphonate		269-511-6	68259-08-5

116	potassium perfluorohexane-1-sulphonate		223-393-2	3871-99-6
117	perfluorohexane-1-sulphonic acid		206-587-1	355-46-4
118	Ethanaminium, N-[4-[[4-(diethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)			1310480-24-0
119	Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)			1310480-27-3
120	Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(phenylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)			1310480-28-4
121	Beta-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-)(1:1)			1329995-45-0
122	Gamma-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-)(1:1)			1329995-69-8
123	Sulfonium, triphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)			144116-10-9
124	Quinolinium, 1-(carboxymethyl)-4-[2-[4-[4-(2,2-diphenylethenyl)phenyl]-1,2,3,3a,4,8b-hexahydrocyclopent[b]indol-7-yl]ethenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)			1462414-59-0
125	Iodonium, diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)			153443-35-7
126	Methanaminium, N,N,N-trimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1)			189274-31-5
127	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd.with 2-methyl-2-propanamine (1:1)			202189-84-2
128	Iodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)			213740-81-9
129	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, zinc salt			70136-72-0
130	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, lithium salt (1:1)			55120-77-9
131	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, sodium salt			82382-12-5
132	Iodonium, bis[(1,1-dimethylethyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1) (9CI)			866621-50-3
133	Sulfonium, (4-methylphenyl)diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)			910606-39-2
134	Sulfonium, [4-[(2-methyl-1-oxo-2-propen-1-yl)oxy]phenyl]diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)			911027-68-4

135	Sulfonium, [4-[(2-methyl-1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1), polymer with 2-ethyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate, 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate and tetrahydro-2- oxo-3-furanyl 2-methyl-2-propenoate			911027-69-5
136	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, cesium salt (1:1)			92011-17-1
137	Dibenzo[k,n][1,4,7,10,13]tetraoxathiacyclopentadecinium, 19-[4-(1,1-dimethylethyl)phenyl]-6,7,9,10,12,13-hexahydro-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)			928049-42-7
138	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, gallium salt (9CI)			341035-71-0
139	Sulfonium, bis(4-methylphenyl)phenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)			341548-85-4
140	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, scandium(3+) salt (3:1)			350836-93-0
141	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, neodymium(3+) salt (3:1)			41184-65-0
142	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, yttrium(3+) salt (3:1)			41242-12-0
143	Sulfonium, (thiodi-4,1-phenylene)bis[diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:2)			421555-73-9
144	Iodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic			421555-74-0
145	Sulfonium, tris[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)			425670-70-8
146	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. With pyrrolidine (1:1)			1187817-57-7
147	N,N,N-triethylethanaminium tridecafluorohexane-1-sulfonate			108427-55-0
148	N,N,N-tributylbutan-1-aminium tridecafluorohexane-1-sulfonate			108427-54-9
149	Phosphonium, triphenyl(phenylmethyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)			1000597-52-3
150	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. withN,N-diethylethanamine (1:1)			72033-41-1
151	p-(1,1-dimethylpropyl)phenol		201-280-9	80-46-6
152	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts			
153	Nonadecafluorodecanoic acid		206-400-3	335-76-2
154	sodium nonadecafluorodecanoate			3830-45-3
155	Ammonium nonadecafluorodecanoate		221-470-5	3108-42-7

156	4-heptyl phenol, branched and linear	substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, also covering UVCB- and well-defined substances which include any ofthe individual isomers or a combination thereof		
157	4-heptylphenol		217-862-0	1987-50-4
158	Phenol, heptyl derivs.		276-743-1	72624-02-3
159	4-(3-ethylpentan-3-yl)phenol			37872-24-5
160	4-(2-methylhexan-2-yl)phenol			30784-31-7
161	4-(3,3-dimethylpentan-2-yl)phenol			911371-06-7
162	4-(3-methylhexan-2-yl)phenol			854904-93-1
163	4-(4,4-dimethylpentan-2-yl)phenol			911371-07-8
164	4-(4-methylhexan-2-yl)phenol			71945-81-8
165	4-(5-methylhexan-2-yl)phenol			857629-71-1
166	4-(2,2-dimethylpentan-3-yl)phenol			861010-65-3
167	4-(3-methylhexan-3-yl)phenol			30784-32-8
168	4-(heptan-3-yl)phenol			6465-74-3
169	4-(heptan-2-yl)phenol			6863-24-7
170	4-(heptan-4-yl)phenol			6465-71-0
171	4-(3-ethylpentyl)phenol			911370-98-4
172	4-(3-methylhexyl)phenol			102570-52-5
173	4-(4-methylhexyl)phenol			1139800-98-8
174	4-(5-methylhexyl)phenol			100532-36-3
175	4-(2,4-dimethylpentan-3-yl)phenol			1824346-00-0
176	Phenol, 4-tert-heptyl-			288864-02-8
177	Phenol, 4-(1-ethyl-1,2-dimethylpropyl)-			30784-27-1
178	4-(2,3-dimethylpentan-2-yl)phenol			861011-60-1
179	4-(2,4-dimethylpentan-2-yl)phenol			33104-11-9
180	4-(2,3,3-trimethylbutan-2-yl)phenol			72861-06-4

181	4-(5-methylhexan-3-yl)phenol			854904-92-0
182	4,4'-isopropylidenediphenol	Bisphenol A; BPA	201-245-8	80-05-7
183	Benzo[def]chrysene (Benzo[a]pyrene)		200-028-5	50-32-8
184	Perfluorononan-1-oic-acid and its sodium and ammonium salts			
185	Ammonium salts of perfluorononan-1-oic-acid			4149-60-4
186	Perfluorononan-1-oic-acid		206-801-3	375-95-1
187	Sodium salts of perfluorononan-1-oic-acid			21049-39-8
188	Nitrobenzene		202-716-0	98-95-3
189	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)		253-037-1	36437-37-3
190	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)		223-383-8	3864-99-1
191	1,3-propanesultone		214-317-9	1120-71-4
192	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2]	covering any of the individual stereoisomers of [1] and [2] orany combination thereof		
193	Reaction mass of 5-[(2R)-butan-2-yl]-2-[(1R,2R)-2,4-dimethylcyclohex-3- en-1-yl]-5-methyl-1,3-dioxane and 5-[(2R)-butan-2-yl]-2-[(1R,6R)-4,6-dimethylcyclohex-3-en-1-yl]-5-methyl-1,3-dioxane and 5-[(2S)-butan-2-yl]-2-[(1R,2R)-2,4-dimethylcyclohex-3-en-1-yl]-5-methyl-1,3-dioxane and 5-[(2S)-butan-2-yl]-2-[(1S,2R)-2,4-dimethylcyclohex-3-en-1-yl]-5-methyl-1,3-dioxane and 5-[(2S)-butan-2-yl]-2-[(1S,6R)-4,6-dimethylcyclohex-3-en-1-yl]-5-methyl-1,3-dioxane			
194	2-(2,4-Dimethylcyclohex-3-ene-1-yl)-5-methyl-(1-methylpropyl)-1,3-dioxane			117933-89-8
195	5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane			
196	1,3-Dioxane, 2-(2,4-dimethyl-3-cyclohexen-1-yl)-5-methyl-5-(1-methylpropyl)-			186309-28-4
197	1,3-Dioxane, 2-[(1R,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, cis-			676367-05-8
198	1,3-Dioxane, 2-[(1R,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, cis-rel-			343934-04-3
199	1,3-Dioxane, 2-[(1R,2R)-2,4-dimethyl-3-cyclohexen-1-yl]-5-methyl-5-(1-methylpropyl)-, trans-			676367-09-2
432	beta-hexabromocyclododecane			134237-51-7
433	gamma-hexabromocyclododecane			134237-52-8
434	Dibutyl phthalate (DBP)		201-557-4	84-74-2
435	Diarsenic trioxide		215-481-4	1327-53-3

436	Diarsenic pentaoxide		215-116-9	1303-28-2
437	Cobalt dichloride		231-589-4	7646-79-9
438	Bis(tributyltin) oxide (TBTO)		200-268-0	56-35-9
439	Bis (2-ethylhexyl)phthalate (DEHP)		204-211-0	117-81-7
440	Benzyl butyl phthalate (BBP)		201-622-7	85-68-7
441	Anthracene		204-371-1	120-12-7
442	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)		287-476-5	85535-84-8
443	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)		201-329-4	81-15-2
444	4,4'- Diaminodiphenylmethane (MDA)		202-974-4	101-77-9