# **Product Safety and Compliance** Version UTEC-PS-002 issued on March 31, 2009

#### **UTec – Your Reliable Green Business Partner**





### Content

- Introduction
- Our Product Safety Statement
- Operational Assurance on Product Safety
- Product Safety Management Committee
- Product Safety Management Milestone
- IECQ QC080000 Certification
- EU REACH Compliance
- EU RoHS Compliance





### Introduction

There is growing public awareness of product safety after the outbreak of a number of major incidents relating to hazardous substances found in toys and other products. The governments in many countries have also tightened the corresponding product safety regulations. It is therefore very important that companies supply products that are safe to use and comply with those regulations.

UTec is dedicated to supply products that are safe to use and environmentally friendly throughout their life cycles. We are a pioneer in implementing green quality and product safety management, commencing with the ISO14001 certification in 2000. All our products are RoHS compliant and also satisfy the requirements under the EU REACH regulations and those under the US Consumer Product Safety Improvement Act of 2008. Our manufacturing site is also the World's First manufacturer in printer consumables industry to certify to IECQ QC080000.

By selecting UTec products, customers can be assured that no hazardous substances are being used in production and they can avoid the risk of breaching the relevant regulations on product safety.









UTec is dedicated to supply products that are safe to use and environmentally friendly throughout their life cycles







### **Our Product Safety Statement**

- We are committed to providing our customers with products that are <u>safe to use</u> <u>and environmentally friendly</u> throughout their life cycles
- We endeavor to <u>comply with product safety</u> regulations of all countries that our products are delivered
- We <u>support our customers to comply with regulations on product safety by</u> providing necessary information and documents for compliance with the regulations in their countries





### **Operational Assurance on Product Safety**

#### Product development stage

- We <u>target for zero waste</u> in our product design and development process
- We include <u>product safety compliance</u> in our product development stages by specifying the use of REACH & RoHS compliant materials
- We also implemented <u>green procurement management</u> with strict monitoring and control of our supplies source

Waste Toner Treatment

#### **Manufacturing**

- Our manufacturing processes are carefully designed and configured to ensure <u>zero contamination</u> from our manufacturing wastes to the environment
- We <u>recycle</u> water, energy and materials to reduce the waste produced
- We <u>invest heavily in treatment facilities</u> to treat the waste water and toner produced during production to ensure <u>zero contamination to the</u> <u>environment and minimize health hazard to our workers</u>



Waste Water Treatment





### **Operational Assurance on Product Safety**

#### **QA Audit**

• Our <u>Quality Assurance Audit</u> entails incoming, process, outgoing and final QA to ensure that our products meets all customer specifications and <u>Product Safety</u> <u>requirements</u> before delivery to customers

#### **Monitoring & Record**

- <u>Enterprise Quality Portal with Early Warning system</u> in place to assist management to manage the process and prepare preventive action for possible deviations
- <u>Regular audit and monitoring</u> conducted by corporate Quality Systems Audit Team

#### **Continuous Improvement**

• We emphasis on <u>continuous improvement</u>, working teams and committees are formed to formulate strategic improvement projects

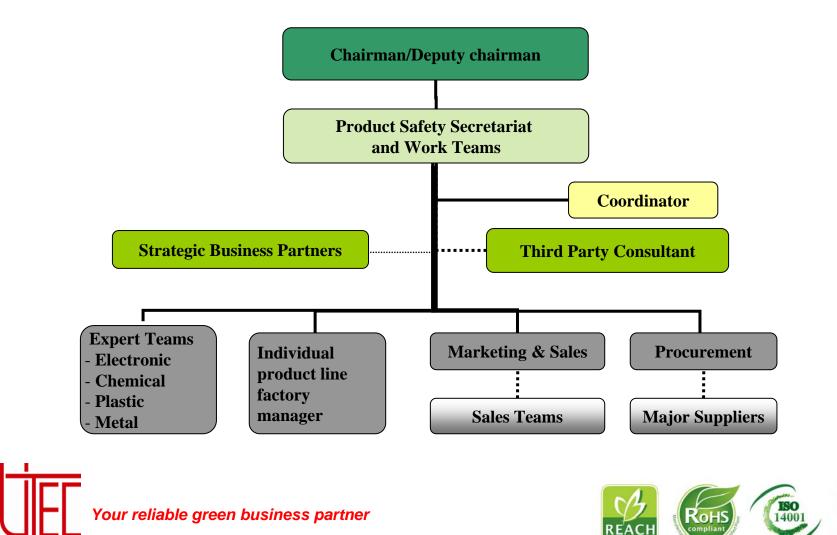






#### **Product Safety Management Committee**

Our Product Safety Committee is formed with cross-functional representatives and team of experts. The Committee will release policies and guidelines for all business entities and keep top management alert to changes of product safety requirements

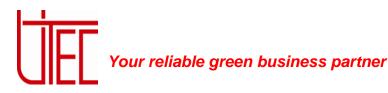


### **Product Safety Management Committee**

- Invite major customers to act as advisor to our Safety Committee's operation
- Understand our customers' requirement and align with their goals and objectives
- Work with our vendors to comply with necessary directives and regulations
- Periodic Review and Continuous Improvement
- Total Supply Chain Synchronization

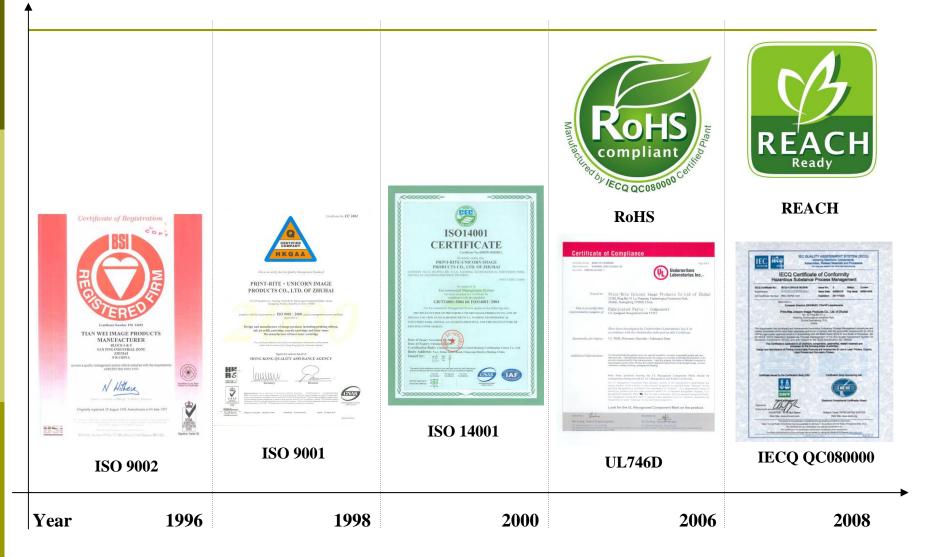






### **Product Safety Management Milestone**

Our manufacturing site is a pioneer in quality and product safety management

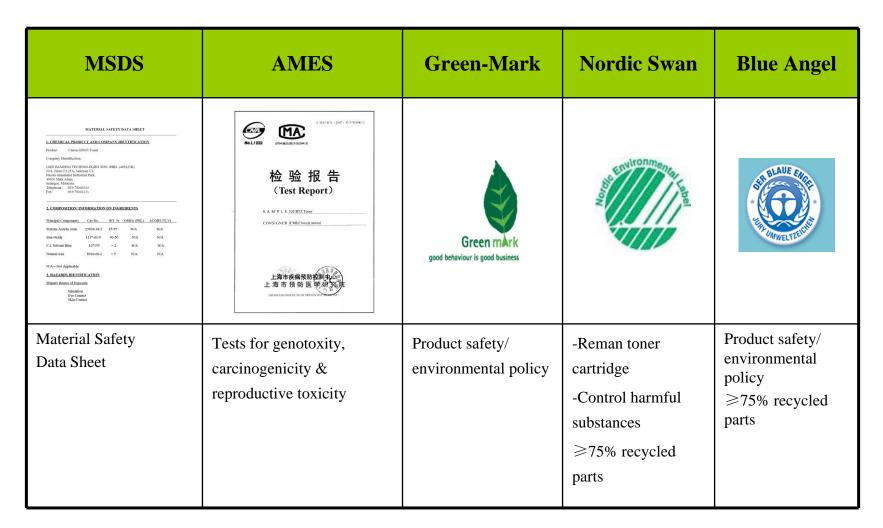






### **Product Safety Management Milestone**

We support our customers to prepare and obtain accreditations and green product labels







# **IECQ QC080000 Certification**





## What is IECQ QC080000 Certification?

- IECQ QC080000 is the specification requirement for implementation of IECQ HSPM (Hazardous Substance Process Management) system certification issued by the IEC (International Electrotechnical Commission) in October 2005, based on the EIA/ECCB Standard 954 Electrical and Electronic Components and Products Hazardous Substance Free Standard and Requirements
- IECQ QC080000 provides the framework for the comprehensive, systematic and transparent management and control of processes pursuant to Hazardous Substance Free (HSF) products and production processes





#### **UTec Manufacturing Site Certified to IECQ QC080000**

- UTec's manufacturing site in Zhuhai China is <u>the World's First manufacturer in printer</u> <u>consumables industry to receive IECQ QC080000 certification</u>
- An organization that has been certified to IECQ QC080000 can demonstrate that it has established an effective management system to control and manage hazardous substances in order to <u>comply with the requirements of EU RoHS, REACH and other relevant</u> <u>product safety regulations</u>





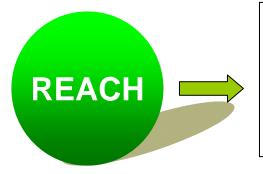


# **EU REACH & RoHS Compliance**

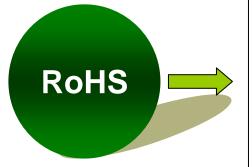




### **EU REACH & RoHS Compliance**



REACH is a new European Union regulation concerning the **R**egistration, **E**valuation, **A**uthorization and restriction of **Ch**emicals (**REACH**). The regulation came into force on 1<sup>st</sup> June 2007



The European Union publicized and enforced the Directive on the **R**estriction of the Use of Certain **H**azardous **S**ubstances in Electrical and Electronic Equipment (**RoHS**) on 13<sup>th</sup> Feb 2003 and 1<sup>st</sup> July 2006 respectively





# **REACH Compliance**





### What is REACH?

- REACH is a new European Union regulation concerning the <u>Registration, Evaluation,</u> <u>Authorization and restriction of CHemicals</u>. The regulation was publicized on 30<sup>th</sup> Dec 2006 and came into force on 1<sup>st</sup> June 2007
- According to REACH, EU manufacturers or importers are required to <u>register</u> <u>substances they produce or import in quantities over 1 tonne per year</u>
- The registration requirement applies to <u>substances on their own, in preparations and in</u> <u>articles under special conditions (intentional release)</u>. Failure to register means that the substance cannot be manufactured, imported or used in the EU market
- Quantities of 10 tonnes or more per year additionally require the submission of a Chemical Safety Report (CSR) to document the safety assessment of the substance







#### **REACH Timeline**

30th December	REACH was publicized
1st June 2007	REACH entered into force
1st June 2008	European Chemicals Agency (ECHA) under REACH entered into operation. It acts as the central point in the REACH system
1st December 2008	Deadline for Pre-registration. Pre-registered can benefit from extended registration deadlines (2010, 2013 or 2018) depending on the produced or imported annual volume of substances
1st December 2010	Deadline for registration of chemicals of very high concern and substances produced or imported in high volumes (above 1,000 tonnes per year)
1st June 2013	Deadline for registration of chemicals produced or imported in quantities between 100 and 1,000 tonnes per year
1st June 2018	Deadline for registration of low volume chemicals between 1 and 100 tonnes per year





## **Registration Item**

Substance	Preparation	Article
A chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition	Mixture or solution of two or more substances	An object which during production is given a specific shape, surface or design, which determines its function to a larger degree than its chemical composition
Eg. individual pigments, solvent chemicals, etc	Eg. mixture of pigments & solvents, ink, toner	Eg. battery, ink cartridge, toner cartridge





### **Substance of Very High Concern**

European Chemicals Agency publicized the Candidate List of 15 Substances of Very High Concern (SVHC) on October 28th, 2008

SVHC				
CRM Carcinogenic, Mutagenic or toxic to Reproduction	<b>PBT</b> Persistent, Bioaccumulative and Toxic	<b>vPvB</b> Very Persistent and very Bioaccumulative	Identified, on a case-by- case basis, from scientific evidence as causing probable serious effects to human health or the environment of an equivalent level of concern as those above	
According to the criteria for classification in category 1 or 2 in accordance with Directive 67/548/EEC	According to the criteria in Annex XIII of the REACH Regulation	According to the criteria in Annex XIII of the REACH Regulation	Eg. Endocrine disrupters	





### Who has Registration Obligations?

- EU manufacturers and importers of substances on their own or in preparation
- EU producers and importers of articles meeting the criteria of Article
- Only representative (OR) established in the EU and appointed by a manufacturer, formulator or article producer established outside the EU to fulfill the registration obligation of importers





### What has UTec done for REACH Compliance?

#### (1) Pre-registration Completed before deadline

- We have <u>put in place an Only Representative (OR) in EU to handle the pre-registration of</u> <u>substances</u>. To comply with REACH regulations, we have <u>recorded our customers (EU</u> <u>importers) as a Downstream User</u> of our OR. The substances do not need to be registered again by our customers
- We <u>have completed the pre-registration</u> via appointed Only Representative for <u>all</u> <u>substances contained in our ink, ribbon and toner</u> which are classified as preparation under REACH that may exceed the tonnage threshold of registration for substances imported into the EU market
- We have a <u>full plan for carrying out registration for substances in phases</u> according to our assessment of export quantities or to seek suppliers who have fulfilled the registration requirement
- We will closely monitor the latest development of REACH and continue to fulfill the requirements



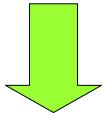




### What has UTec done for REACH Compliance?

#### (2) Confirmation of SVHC Clearance

European Chemicals Agency publicized the Candidate List of 15 Substances of Very High Concern (SVHC) on October 28th, 2008



We confirmed that <u>NO substance</u> on the Candidate List of SVHC publicized by EU in Oct 2008 is used or intentionally added in our products under REACH regulations





### What has UTec done for REACH Compliance?

#### (3) Continuous Support to Customers

We support our customers to meet their product safety compliance requirements

- Official notice to customers on the appointment of <u>Only Representative (OR) and</u> <u>confirmation that NO substance on the Candidate List of SVHC is used or intentionally</u> <u>added in our products</u>
- Provision of other specific information and data requested by customers
- Regular information updates to customers via our newsletter









# **RoHS Compliance**





### What is RoHS?

- The European Union publicized and enforced the Directive on the **R**estriction of the Use of Certain **H**azardous **S**ubstances in Electrical and Electronic Equipment (**RoHS**) on 13th Feb 2003 and 1st July 2006 respectively
- The RoHS Directive restricts the use of six hazardous substances:

Substance	<b>RoHS LIMIT: MCV - Maximum Concentration Values</b>
1. Cadmium (Cd)	< 0.01% = < 100 PPM
2. Mercury (Hg)	< 0.10% = < 1,000PPM
3. Hexavalent Chromium (Cr <sup>6+</sup> )	< 0.10% = < 1,000PPM
4. Lead (Pb)	< 0.10% = < 1000 PPM
5. Polybrominated Byphenyls (PBB)	< 0.10% = < 1,000PPM
6. Polybrominated Diphenyl Ethers (PBDE)	< 0.10% = < 1,000PPM





### What is RoHS?

The RoHS Directives' scope of coverage includes:

<b>Categories of Electrical &amp;</b> <b>Electronic Equipment Affected</b>	Examples
Household appliances	Refrigerators, washing machines, microwaves, air conditioners, vacuum cleaners, irons, hair dryers
IT and telecommunications equipment	Mainframes, personal computing, facsimile, telephone
Consumer equipment	Radio, television, Hi-Fi
Lighting equipment	CFLs, flow pressure sodium lamps
Electrical and electronic tools	Drills, saws, sewing machine
Toys, leisure & sports equipment	<i>Electric trains or car racing sets, hand-held video game consoles</i>
Automatic dispensers	Automatic dispenser for hot or cold bottles or cans





### What has UTec done for RoHS Compliance?

- It is not clearly defined whether printer cartridges fall under RoHS governance in the directive. Opinions of professional organizations are also divided. However, due to increasing public awareness of product safety, many customers require RoHS compliance from aftermarket printer cartridges suppliers
- All materials used in our manufacturing site for production have been RoHS compliant since 1 January 2006. The site is also one of the first printer cartridge manufacturers in the world to certify to IECQ QC080000
- By buying RoHS compliant products, customers can be assured that the products are safe to use and do not contain those hazardous materials in excess of the restricted limits and they can avoid the risk of breaching the relevant regulations on product safety





#### **UTec – Your Reliable Green Business Partner**

# **Thank You**





#### **UTec – Your Reliable Green Business Partner**

#### Union Technology International (M.C.O.) Co., Ltd.

Address:	14H, Nam Kwong Building, 223-225 Avenida Dr Rodrigo Rodrigues,
	Macao SAR
Tel:	(853) 2871 5020
Fax:	(853) 2871 5001
Email:	sales@utec.com.mo
Website:	www.union-tec.com





