



CIRS

C&K

C&K Testing



Tattoo Inks and PMU Products Testing

▣ About Us

C&K Testing is a leading testing company to render you specialised solutions concerning green and sustainable development of products. Established in 2008, we've helped thousands of customers to minimise the risks of their products to human health and the environment through our testing services.

Our company is a member of CIRS which is a leading product safety management consulting firm. With our offices in Ireland and the United States as well as our laboratory in China, a global network of testing facilities enables you to meet all the relevant regulatory requirements across different markets more cost-efficiently.

Combining widely global recognition and extensive local experience, staffed by knowledgeable experts, C&K Testing will help you to gain a competitive advantage in the global marketplace by ensuring product safety and quality, removing trade barriers and optimising manufacturing procedures.

Our Testing Services: food and food-related products, cosmetics, environment, consumer products, industrial goods and chemicals, etc.

A tattoo is a form of body modification, made by inserting indelible ink into the dermis layer of the skin to change the pigment. It is usually regarded as a symbol of beauty, mystery and charm, giving a full play to one's unique characteristic and personal belief. Although there are no relevant safety requirements on such products in China, yet the safety of permanent make-up (PMU) including tattoo inks is a rising concern in EU and US market. Furthermore, legislations are set to regulate relevant products.

Permanent makeup is a cosmetic technique which employs tattoos (permanent pigmentation of the dermis) as a means of producing designs that resemble makeup, such as eyelining and other permanent enhancing colors to the skin of the face, lips, and eyelids.

The main ingredients of tattoo inks are colourants and related auxiliaries. Risks may be frequently found when polycyclic aromatic hydrocarbons (PAHs), aromatic amines, heavy metals and microorganism that it contains exceed the limit. However, the foregoing substances are usually carcinogenic, mutagenic or have reproductive toxicity. So such notifications are quite common on the EU market.

Overview of Product Notifications

Product	Tattoo ink	Tattoo ink	Tattoo ink
Risk	The product contains polycyclic aromatic hydrocarbons (PAHs), (measured value of PAHs up to 2.5 mg/kg). The product does not comply with the Council of Europe Resolution ResAP (2008)1.	The product contains aromatic amines (measured values for o-anisidine and o-toluidine 14 mg/kg and 86 mg/kg respectively). The product does not comply with the Council of Europe Resolution ResAP (2008)1.	The product contains arsenic, barium, lead and zinc (measured values 49 mg/kg, 103 mg/kg, 25 mg/kg and 107 mg/kg respectively). The product does not comply with the Council of Europe Resolution ResAP (2008)1.
Notifying country	Germany	Sweden	Sweden
Notifying date	Week 28, 2015	Week 22, 2015	Week 22, 2015
Measures adopted by notifying country	Import rejected at border	Withdrawal of the product from the market	Withdrawal of the product from the market

Legal Requirements

Limits for Partial Elements or Compounds in The Council of Europe Resolution ResAP(2008)1			
Element/compound	Limit	Element/compound	Limit
Arsenic	2 ppm	Mercury	0.2 ppm
Barium	50 ppm	Nickel	As low as technically achievable
Cadmium	0.2 ppm	Lead	2 ppm
Cobalt	25 ppm	Selenium	2 ppm
Chromium (VI)	0.2 ppm	Antimony	2 ppm
Copper soluble	25 ppm	Tin	50 ppm
Zinc	50 ppm	27 aromatic amines	Banned
Polycyclic aromatic hydrocarbons (PAHs)	0.5 ppm	Benzene-a-pyrene (BaP)	5 ppb

*Remarks: see the original of The Council of Europe Resolution ResAP(2008)1 for the full information

In addition to requirements for heavy metals, organic solvents and certain colourants, the resolution also requires that the packaging of tattoo and PMU products include the following information:

- Name and address of manufacturers or the person that in charge of placing such products in the market;
- Validity of such products;
- Use conditions and warnings;
- Batch No. or other batch certifications used by manufacturers;
- The formulation shall bear IUPAC name, CAS No. and CI No.;
- Guarantee of sterile inclusion.

Our Strengths

• **Our Lab**

Our laboratory has established a management system according to ISO/IEC 17025. It is equipped with Agilent gas chromatograph mass spectrometer (GC-MS), liquid chromatography mass spectrometry (LC-MS), ultraviolet/infrared spectrophotometer, atomic absorption spectrometer, platinum ellman inductively coupled plasma atomic emission spectrometry (ICP), X-ray energy dispersive spectrometer (EDX), Anton Paar microwave digestion instrument and so on.

C&K Testing is accredited by China National Accreditation Service for Conformity Assessment (CNAS) and China Metrology Accreditation (CMA). In addition, it is recognised by the US Consumer Product Safety Commission (CPSC) as a 3rd-party testing company in China.



CNAS



CMA



CPSC

Apart from the advanced equipment, we also boast talented technicians who have accumulated years' experience in product testing. Some of them used to participate in the drafting of several GB standards (mandatory standards in China).

Based on profound experience in the industry, we are able to customise solutions to satisfy requirements across different markets or recommend tailored testing plans for customers.

• **Worldwide Accreditation**

Gaining worldwide accreditation, C&K Testing has succeeded in rendering testing services for many renowned companies at home and abroad.





In the meantime, we keep a close relationship with many associations in the industry with a desire to serve our customers more effectively.

• **Competitive Prices**

C&K Testing can also provide customers with competitive prices by virtue of the well-equipped lab.

The following is a comparison list for several test items between a testing company in Germany and us:

Test items	Testing company in Germany			C&K Testing		
	Report (postal delivery)	Report (e-mail)	Each addition	Report (postal delivery)	Report (e-mail)	Each addition
Polycyclic aromatic hydrocarbons (PAHs)	369,00€	349,00€	123,00€	165,00€	150,00€	30,00€
Aromatic amines	369,00€	349,00€	123,00€	135,00€	120,00€	30,00€
Heavy metals	369,00€	349,00€	123,00€	165,00€	150,00€	30,00€

As shown in the form, C&K Testing is always committed to rendering services for customers from different countries or areas with more reasonable prices based on our professional experience.

Our Solution

C&K Testing makes compliance evaluation of your products prior to testing in order to be in strict accordance with relevant regulations and requirements. It's our pleasure to help you with compliance problems based on our professional advice.



Contact us

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