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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

SN/T 3715-2013

**Cosmetics-In vitro test method for embryotoxicity-Rat whole
embryo culture test
(English Translation)**

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard is proposed and managed by the National Certification and Accreditation Administration Committee.

This standard was drafted. People's Republic of China Shanghai Entry-Exit Inspection and Quarantine Bureau, Shanghai National Center for Drug Safety Evaluation Center, Shanghai Quality Supervision, Inspection Technology Research Institute.

1 Scope

This standard specifies the test methods for the whole embryo cosmetics and cosmetic ingredients developmental toxicity test in rats.

This standard applies to cosmetics and cosmetic ingredients in vitro developmental toxicity testing.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB 14925 Laboratory Animal Facilities and Environment

3 Terms and Definitions

The following terms and definitions apply to this document.

The maximum no-effect concentration ICNOECTMS no effect on morphology score

maximum dose.

Maximal inhibitory concentration IC_{max} Biggest cause embryonic malformations occurred lowest concentration.

4 Fundamentals

After implantation rat whole embryo culture method can be used to evaluate the test substance is caused embryonic development leading to fetal malformation. This method makes Embryos with rats having 1 to 5 somites. Typically, these embryos compared with the day-old embryos for longer, its heart development, neural tube More sensitive to foreign compounds closure, ear and eye development, arm and limb buds and so on. The phase of the intervention may cause growth retardation, One or more organ primordia specific deformity. Embryo culture incubator to the rotation in favor of medium exchange with the gas phase above the gas. Rear as the embryo's oxygen requirement increasing oxygenation response medium. Morphological embryo culture was evaluated. By exposure Embryo group and the control group embryos were compared in order to determine whether the embryo toxicity test substance.

5.1.1 Rat strains

Any quality through positive and negative controls to detect the compound and having a large number of embryos/strain rat pups can be used in this test.

Selection of 7 to 10-week-old female rats two weeks before mating animals adapt. Male rats at least 10 weeks or more. Serum was prepared to body weight in rats