

SAFEGUARDS

SGS CONSUMER TESTING SERVICES

COSMETICS, PERSONAL CARE AND HOUSEHOLD

NO. 151/12 SEPT 2012

NEW ISO STANDARD FOR EVALUATION OF ANTIMICROBIAL PROTECTION OF COSMETIC

Microbial contamination is one of the most important concerns in quality of cosmetic products. In addition to ensuring the product to be free from harmful microorganisms, controlling the growth of microorganisms introduced during normal use of cosmetic products is also important. Preservatives are commonly added to inhibit the growth of microorganisms in cosmetics which provides favorable conditions for the microorganism to growth, e.g. presence of water, high nutrient content and suitable pH etc. To determine the antimicrobial protection of the preservatives for the cosmetic products, currently, the industry utilizes the pharmacopeial method as reference. In July 2012, ISO (the International Organization for Standardization) introduced a standard, [ISO 11930:2012](#), which is primarily designed for evaluation of antimicrobial protection in cosmetics and determination of the overall preservative protection of cosmetic product.

Overall antimicrobial effect of cosmetic products is generally contributed by factors such as the addition of chemical preservatives, inherent characteristics of the formula, package design and manufacturing process. ISO 11930:2012 outlines the procedure for evaluation of antimicrobial protection of a cosmetic product by preservation efficacy test and the microbiological risk assessment based on ISO 29621. The development of new ISO standard helps the industry to ensure the quality of cosmetic products and safeguarding consumers' from the risk that may be caused by presence of pathogens during use.



SGS

TABLE 1. COMPARISON AMONG ISO 11930:2012, US PHARMACOPEIA (USP) AND EUROPEAN PHARMACOPEIA METHOD FOR ANTIMICROBIAL EFFECTIVENESS TEST (OR CHALLENGE TEST)

	ISO 11930:2012	EUROPEAN PHARMACOPEIA	USP
SCOPE	Designed specifically for cosmetic products	Designed specifically for pharmaceutical products	
TEST MICROORGANISMS	Strains: <ul style="list-style-type: none"> • Staphylococcus aureus • Pseudomonas aeruginosa • Escherichia coli • Candida albicans • Aspergillus brasiliensis 		
STUDY TIME POINTS	3 time points for bacteria and yeast (Day 7, Day 14 and Day 28) 2 time points for mold (Day 14 and Day 28)	4 time points for bacteria (Day 2, Day 7, Day 14 and Day 28) 2 time points for yeast and mold (Day 14 and Day 28)	2 time points for bacteria (Day 14 and Day 28) 2 time points for yeast and mold (Day 14 and Day 28)
CRITERIA	2 Criteria (Criteria A and B) Criterion B is less stringent than Criterion A but only applies when there is other control factor, e.g. a package that can reduce the chance of microbial contamination after first use.	2 Criteria (Criteria A and B) Criterion B is less stringent than Criterion A but only applies when it is considered that if higher concentration of preservative added to the product may poses hazard to health	One criterion only
STRINGENCY OF CRITERIA	Intermediate	High	Low

It is crucial for all cosmetic, personal care and household products to be safe effective and stable. SGS provides testing, inspection, auditing and consulting services to manufacturers, distributors and importers to ensure a high level of product quality in every area. Our state of the art laboratories offer custom-made solutions for chemical, biophysical, microbiological, stability and toxicological aspects. We also have extensive capabilities in performance testing, claim support studies and consumer panels. Our testing is conducted according to customer specific or recognised standard methods, some of which were developed by SGS. Our cosmetic safety assessors and other technical experts can support customers by making sure new products comply with regulatory requirements.



SOLUTION

Rely on a company whose experience and competence makes it the world's leader in Testing, Inspection and Certification. If you are interested in our services, please don't hesitate to contact us and visit our website.

FOR ENQUIRIES:

Global Competence Support Centre: gcsc@sgs.com
 HK-Ivan Tsui Tel: +852 2204 8374 (ext 1374), Fax: +852 2603 7577 or Ivan.Tsui@sgs.com
 Asia – Hong Kong. Tel: +852 2334 4481 Fax: +852 2144 7001 mktg.hk@sgs.com
 Australasia – Perth. Tel: +61 (0) 3 9790 3418 Fax: +61 (0) 3 9701 0988 au.cts@sgs.com
 Europe – London – UK. Tel: +44(0) 203 008 7860 Fax: +44 (0) 203 00 7870 gb.cts.sales@sgs.com
 Africa & Middle East – Turkey. Tel: +90 212 368 40 00 Fax: +90 212 296 47 82 sgs.turkey@sgs.com
 Americas – USA. Tel: +1 973 575 5252 Fax: +1 973 575 7175 uscts.inquiries@sgs.com

www.sgs.com/cts Global Competence Support Centre: gcsc@sgs.com
 If you wish to unsubscribe to this technical bulletin, go here: [Unsubscribe](#)

© 2012 SGS SA. All rights reserved. This is a publication of SGS, except for 3rd parties' contents submitted or licensed for use by SGS. SGS neither endorses nor disapproves said 3rd parties contents. This publication is intended to provide technical information and shall not be considered an exhaustive treatment of any subject treated. It is strictly educational and does not replace any legal requirements or applicable regulations. It is not intended to constitute consulting or professional advice. The information contained herein is provided "as is" and SGS does not warrant that it will be error-free or will meet any particular criteria of performance or quality. Do not quote or refer any information herein without SGS's prior written consent.

WHEN YOU NEED TO BE SURE

SGS