

KATS Newsletter

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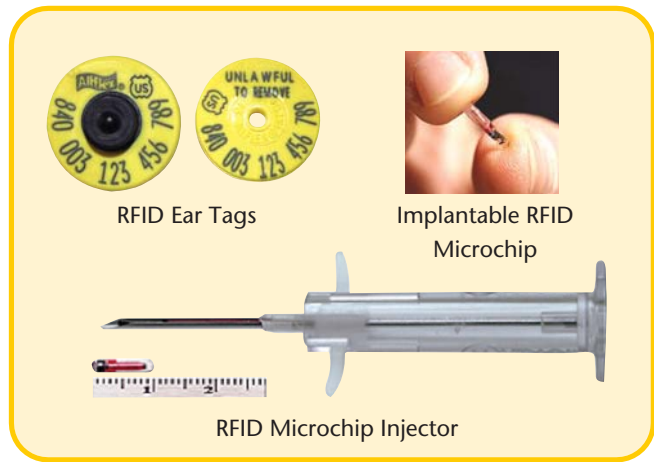
Playground Equipment Safety Management Act Enforced

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Standardized Electronic ID Card for Pets Using RFID Tech



To systematically protect and manage pets by issuing ‘Standardized Electronic ID Card’, KATS plans to revise KS standards for RFID code.

As a unique number given to each animal and stored inside a microchip, the animal RFID number plays the same role as a person’s ID card number.

In accordance with the revised Animal Protection Act that became effective on January 27, KATS intends to make an all-out revision of related KS standards by June this year after collection of opinions from relevant government ministries and local autonomous bodies so that 250 local autonomous bodies, including Seoul, can register and manage pets utilizing implanted RFID microchips.

The implant-type RFID microchip is an ultra-small RFID electronic chip about the size of a grain of rice in a bio glass capsule. It is implanted inside an animal’s body with an injector.

The major content of the KS standards to be revised by June include standardization of the ID number system for pets to suit the Korean environment based on animal ID classification criteria defined by ISO standards.

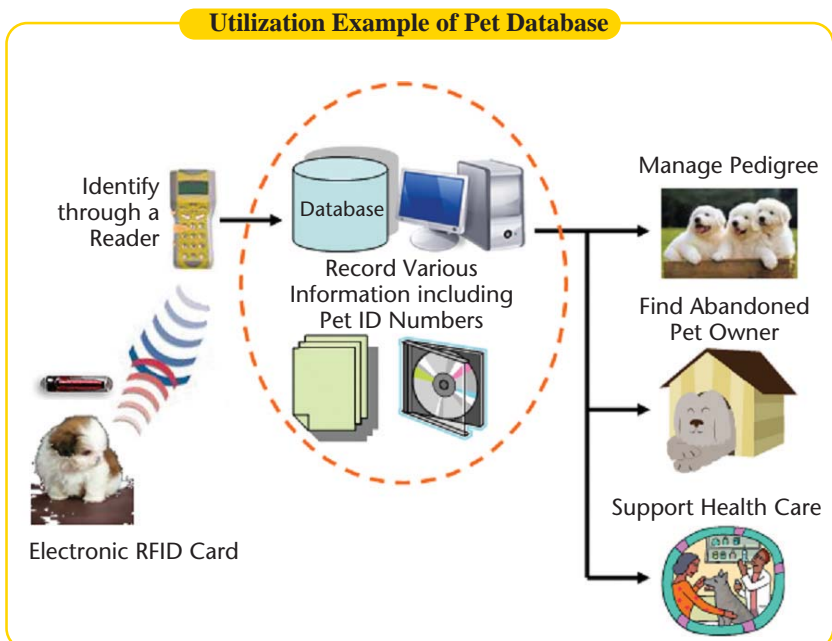
By standardization of the ID number system, it will be possible to establish a pan-national, comprehensive pet management system.

It is also expected to prevent confusion and duplicate expense due to imprudent issue and use of pet ID numbers by respective local autonomous bodies and

private animal protection organizations.

Through linkage to a database that comprehensively manages basic information on owners, health, pedigree, etc. of pets, KATS expects that the nation will be able to respond effectively to management of abandoned animals, illegal sale of pets, and disease management, etc., all of which are emerging as serious social problems.

To accelerate commercialization of animal RFID technology and to nurture related industries in the future, KATS plans to develop additional KS standards that assess the suitability of RFID tags and reading systems and also to expand applications to remote medical treatment of pets, management of wild animals, management of fishery resources, improvement of species through management of genes, etc.



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KATS developed a 'Digital Color Encyclopedia' to help resolve difficulties being experienced by industrial, design & color academic circles and general public due to differences between Korean-language color names and international color names. The encyclopedia includes about 8,000 color names in both Korean and English.

The digital encyclopedia (also referred to as 'standard color pallet') was set in a way that people of every class can understand the Korean and English-language idiomatic color names and academic color names and it includes coordinate values used by color experts.

'Idiomatic color names' and 'academic color names' refer to those often used by the public and those specified by international standards, respectively. To respond to the global standards era, KATS connected Korean conventional color names to Munsell color value, which is widely used worldwide, as well as English-language color names of the

ISCC-NIST (Inter-Society Color Council - National Institute of Standards and Technology).

More precise exchange of color information is also possible as the 'seven color coordinate values' can be utilized by industrial, design and color academic circles in converting Korean color names or English color names into various color coordinate values.

This digital color encyclopedia will be used for education at elementary & middle schools and color & design-related colleges.

Meanwhile, the digital color encyclopedia is expected to make it easier for the public to understand standard color names related to clothing, cosmetics, furniture, etc. when purchasing those products. KATS also anticipates the new color encyclopedia to facilitate communication regarding colors between sellers and buyers at home and abroad via the Internet, to fulfill the desire of industrial, design and color academic communities for color standards and to develop

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Standardizing Thermodynamic Properties of Chemicals

The thermodynamic characteristics of chemical substances, such as density, boiling point and melting point, are utilized as critical data in chemical process design, process improvement and cost reduction.

To support this usage, after designating the Industry-Academic Collaboration Foundation of Korea University (KU) as a 'Reference Standard Data Center,' KATS plans to process and standardize the thermodynamic property data of organic compounds secured by the center and disseminate them to the industrial community.

'Reference Standard' are those data certified after scientific analysis and evaluation of the accuracy and reliability level of measured data and information. These data are prepared for continuous or repeated use widely in all fields of national society.

The mission of the 'Reference Standards Data Center' includes establishment of plans for development of reference standards in related fields, development of reference standards through collection, processing and evaluation and domestic and international cooperation activities.

To utilize the enormous volume of data and information being produced from national science and technology R&D and private R&D investment, KATS established National

Reference Standard Data Center in August 2006. This organization has prepared a system to collect data systematically and to produce and disseminate reference standard data after evaluation of reliability.

Six reference standard data centers have been designated to date, including Korea Research Institute of Standards & Science (KRISS). These centers are providing data to universities, research institutes, industries, etc. KATS intends to designate and nurture a total of 20 data centers by 2010.

Designation Status of Standard Reference Data Centers

Data Field	Designated Centers
Industrial Atomic and Molecular Properties	Korea Basic Science Institute (KBSI) (National Fusion Research Center)
High-Temperature Thermodynamic and Materials Properties	Korea Research Institute of Standards & Science (KRISS)
Thermo-properties of Semiconductor Devices	Korea Research Institute of Standards & Science (KRISS)
Physical Properties of Korean's Electrocardiography and Carotid Artery	Korea Research Institute of Standards & Science (KRISS)
Gene Information	Korea Research Institute of Bioscience & Biotechnology (KRIBB)
Thermodynamic Properties of Organic Compounds	Industry & Academic Collaboration Foundation of Korea University

Playground Equipment Safety Management Act Enforced



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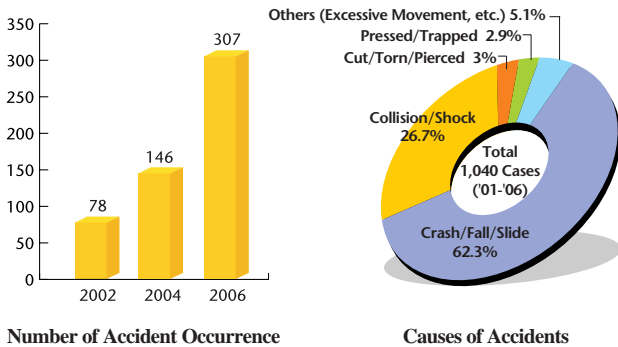
Enforcement of the act is expected to enable more systematic and safer management of playground equipment, ranging from production and installation to maintenance.

KATS recommends the installation of gardening or fences to block entry of animals and pets in order to prevent them from contaminating the playground with parasite eggs and the posting of a warning notice.

Meanwhile, playground management bodies shall conduct safety checks on their own more than once a month and be educated on safety education more than once every two years, while subscribing to compensation insurance.

For the approximately 62,350 playground equipment already installed nationwide, the Act provides a moratorium on enforcement so that management bodies may receive the regular inspection (once every two years) after conducting an initial inspection for installation within next four years.

Report on Accidents Related to Playground Equipment



In accordance with the enforcement of the Act, newly-built playgrounds should be paved with shock-absorbing materials like sand, rubber, etc. and the inspection of spacing between equipment, strength of shock-absorbing flooring material, and whether harmful heavy metal is contained in the sand should be conducted by safety inspection bodies. Furthermore, safety inspection of playground equipment should be conducted regularly once every two years after initial installation.

Status of Existing Playground Equipment

(As of end of November 2007)

Installed Location	Apartment	Park	School/Kindergarten	Nursery Facility
Number	33,201	6,507	10,184	10,755
Installed Location	Child Welfare Facility	Rest Facility, etc.	Total	
Number	202	1,501	62,350	

The Ministry of Commerce, Industry and Energy (MOCIE) has overall responsibility for safety management of production, import and installation for playground equipment, while competent central administration agencies, cities and local governments are responsible for the maintenance and management of playground equipment.

Embargo on Animal-Shaped Electrical Appliances

Due to distribution of animal-shaped electrical appliances in the market recently, children's safety accidents such as burns or electric shock caused by misunderstanding of the products as toys are feared to occur.

To prevent possible accidents, KATS began crackdowns through related business associations while requesting distribution firms and customs offices to prohibit its sale and import.

After conducting a fact-finding survey of online shop and discount stores early this year, KATS found that about 20 kinds of animal-shaped electrical appliances, such as humidifiers, egg steamers and toasters, were being sold at 10,000-30,000 won each. Most of these were products carrying illegal labels purporting to show that importers or sellers had received safety certification.

According to the Electric Appliances Safety Control Act, all electrical appliances to be sold in the market should acquire safety certifications because of accidents like fire and electric shock could occur when misused. The Act also stipulates that parties responsible for attaching safety certification label on the products that have not received the required safety certification shall be subject to less than three years of imprisonment or fines of 30 million won.





Campaign Against Illegal School Supplies



Ahead of the new school semester, KATS staged a street campaign between February 12-15 to eliminate illegal school supplies in five major cities nationwide - Seoul, Daejeon, Daegu, Busan and Gwangju.

“We planned the campaign so that consumers would be able to buy safe products ahead of the new semester,” said a related official at KATS.

During the campaign, held jointly with local governmental bodies, safety certification bodies and consumer organizations, KATS prepared and distributed 50,000 stickers nationwide announcing the prohibited sale of illegal products to school supply stores in five cities.

During the campaign, KATS took administrative measures, including imposition of a maximum 10 million won fine for those found to be selling products without safety mark, while strengthening publicity of its safety management system and guidance activities.

Crackdown on Defective Consumer & Child-related Products

KATS established ‘2008 Safety Investigation Plan for Market-Distributed Products’ and decided to launch a crackdown four times this year on a total of 60 items consisting of 25 consumer products and 35 electrical appliances.

investigation results before the corresponding season and endeavor to block the distribution of defective products in the market.

Targeted items are rice pressure cookers, aquatic equipment, synthetic detergents, and BB guns, which are mostly daily used by consumers and children.

As for manufacturers, importers and distributors that supply defective products, KATS is going to take administrative measures, such as mandatory improvement, suspension of using safety certification labels or withdrawal of safety certificates in accordance with the extent of nonconformity of relevant products.

The items to be investigated are those with high frequency of failure to pass the regular annual inspection; those which proved to be problematic through consumer complaints or media reports; and those requested by consumer organizations, industry associations by product, safety certification bodies, etc.

Meanwhile, KATS requests that consumers make sure the products they want to buy have a safety certification label (KPS: consumer products, eK: electrical appliances) before purchasing them.

For a more efficient crackdown, KATS plans to directly buy products from large retail stores, specialty stores, traditional markets and online stores and request that safety certification bodies conduct the product testing and safety inspections.

Considering that there is a high-demand season for certain products, KATS intends to announce the safety



KS for Bioindustry & Biotech Classification Established

KATS established a Korean Industrial Standard for bioindustry classification code (KS M 1000) to nurture the bioindustry into a future growth engine.

Currently, the global bioindustry market continues to expand rapidly, having achieved an annual growth rate of 14% to US\$91 billion in 2005 from US\$54 billion in 2000. The domestic bioindustry market is also increasing 14% on annual average to about 3.56 trillion won in 2005, up 15.2% compared with the preceding year.

With the classification code developed, it will be possible to plan financial support and formulate national policy for the bioindustry with reliable statistical data. Previously, it was hard to develop accurate statistical data, political measures and provide funding because of the unclear scope of the bioindustry, lack of basic data, etc.

KS M 1000, the bioindustry classification code, clarifies the industry's scope and enables utilization of the same classification criteria by related organizations. Accordingly, the new standard plays a significant role in creating a solid foundation to analyze economic factors, industrial structure and relationships with other industries on a standardized basis for compilation of bioindustry-related statistics provided by classification code.

Regarding areas covered by the classification code and criteria, KATS reflected OECD's industrial classification and Korean Standard Industrial Classification System (KSICS) and classified the bioindustry into eight categories in accordance with the characteristics of products where biotechnologies are utilized at the stage of production, service and R&D.

These eight areas were subdivided again into a total of 51 sub-groups. By including the biotechnology classification code used to define the industry's scope in the annex of the standard, KATS intended to reflect the future development vision of the bioindustry and biotechnology.

Structure of Bioindustry Classification System

Production of Goods	Production of Products	1. Biopharmaceutical Industry 2. Biochemical Industry 3. Biofood Industry 4. Bioenvironmental Industry 5. Bioelectronics Industry 6. Bioprocess and Equipment Industry
	Production of Animals & Plants and Energy	7. Bioenergy and Biosource Industry
Provision of Service	R&D & Analysis Service	8. Bioassay, bioinformatics and R&D Service Industry

Structure of Biotechnology Classification System

R&D	Biomaterials & Cells	A. Genetic Engineering B. Protein Engineering C. Other Macromolecular Engineering D. Cell and Tissue Engineering
	Interpretation and Utilization of Bioinformation	E. Systems Biology and Bioinformatics F. Metabolic Engineering
Production & Utilization	Production	G. Bioprocess Engineering
	Securing of Sources & Application	H. Biosource Production and Utilization I. Environmental Biotechnology and Bioenergy Engineering
	Fusion	J. Nanobiotechnology K. Bioelectronics Engineering
Evaluation	Safety & Efficacy	L. Biosafety and Efficacy Evaluation
Others		M. Other Biotechnology

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'Digital Color Encyclopedia' Launched

global design brands blended with Korean color sensitivity as well.

To increase utilization of color standard from relevant circles and enhance people's color sensitivity, furthermore, KATS plans to promote 'Saekdong Korea Project' which is

for continuous update of color standard information and facilitation of its dissemination.

The digital encyclopedia is available at the 'Saekdong Korea' blog, either accessible through KATS homepage or directly at www.kats.go.kr/colorstandard.