

## Eco-friendly Products

Aiming to offer a 100% environmentally friendly product line by fiscal 2010, Nippon Paint is working hard to develop environmentally conscious products and technologies.

### CELUSTER-MK—Water-based Dual-component Inorganic Coating with Exceptional Weather and Dirt Pickup Resistance

“CELUSTER-MK” is a water-based 2 pack inorganic coating which is curable at ambient temperature. Mainly composed of an inorganic component that forms a hard and strong film, the coating also includes an organic component to compensate for the low elasticity inherent in inorganic compounds. The coating delivers a long-lasting, lustrous appearance even under harsh outdoor conditions.

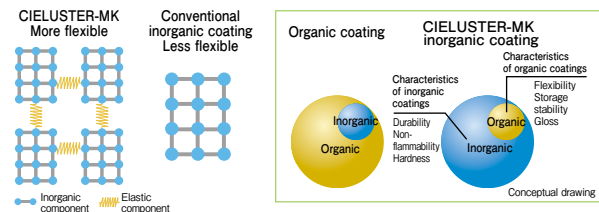
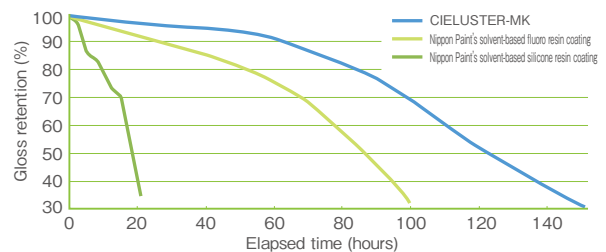
In particular, “CELUSTER-MK” boasts excellent weather resistance that even surpasses that of fluororesin coatings, providing long-term protection for buildings against ultraviolet rays, acid rain and other degradation-causing factors. It is also resistant to dirt pickup and is non-flammable as well. With all these features, “CELUSTER-MK” is ideally suited to a wide range of applications, such as outer walls and iron portions of condominiums, buildings and steel structures. Its unique properties help to reduce repainting and building lifecycle costs.

#### ● Inorganic coating compatible with elastic primers

Conventional inorganic coatings, when reacted to form three-dimensional siloxane, produce a hard and dense paint film, yet such coatings are inherently brittle and crack easily. “CELUSTER-MK” delivers a suspension effect by placing a soft, elastic component between the hard and brittle inorganic components at the molecular level. This results in a paint film that

is hard but hardly cracks, which makes “CELUSTER-MK” ideal for use as a topcoat for elastic primers. It effectively hides cracks for enhanced waterproofing.

#### ▶ Super-accelerated Weather Resistance Testing

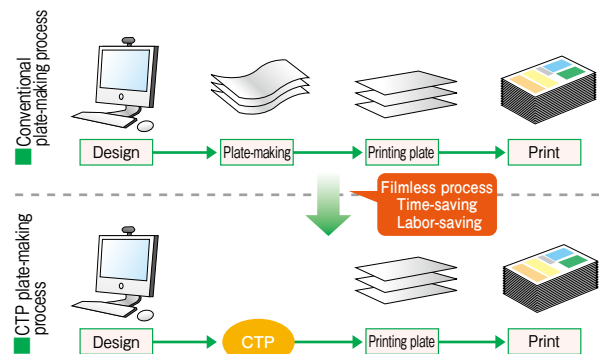


“Inorganic” is an overall term that denotes all chemical compounds other than those that contain carbon (organic compounds). The term “inorganic” in paints and coatings refers to those that contain a large amount of silicon (Si). Inorganic compounds that do not contain carbon, such as glass and stone, are most characterized by high chemical stability. Because of this, inorganic coatings have superior weathering properties, thus earning high expectations as a coating that even surpasses fluororesin coatings.

### Nippe CTP Thermal Plate—Offset Printing Plate for Newspaper Printing That Helps Save Resources and Reduce Waste

Nippe Graphics Co., Ltd. is engaged in the manufacture and marketing of materials, and equipment for printing, information-processing and image-forming. The “Nippe PS Plate” and “Nippe CTP Thermal Plate” from Nippe Graphics are offset printing plates for newspaper printing that were developed to meet the emerging needs of the newspaper printing industry. The plates are developed by utilizing photochemical technology, new materials and image-forming technology that Nippon Paint has refined over many years. In particular, the “Nippe CTP Thermal Plate” is compatible with CTP (Computer-to-Plate) systems. This new plate-making process employs the latest computer and laser technologies, which have shown tremendous advancement in the 21st century and thus have been widely adopted by the

newspaper industry. CTP reduces the number of steps in the plate-making process and can offer resource conservation and waste reduction.



### “The Rose Garden Colors” Series of Water-based Paints Presents the Ideal Way to Decorate Gardens

The Rose Garden Colors®

“The Rose Garden Colors” series of water-based paints adds a colorful touch to gardens. Nippe Home Products Co., Ltd. exhibited this product at the International Roses and Gardening Show held at Seibu Dome in Tokorozawa City, Saitama Prefecture on May 14-19, 2008. It received an overwhelming response from visitors. This product is also popular among gardening enthusiasts for its easy handling and rich array of color shades that matches well with gardening.



International Roses & Gardening Show

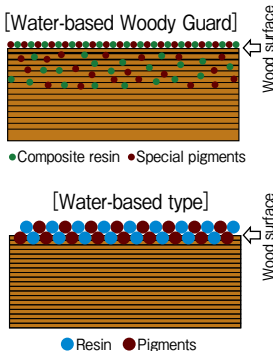
## Water-based Woody Guard—Water-based Wood Stain for Wood Decks and Log Cabins

Recently, wood decks and log cabins have enjoyed increasing popularity among those who enjoy the scent of wood and natural texture. However, these wooden structures are consistently exposed to direct sunlight, rain, wind and severe outdoor conditions, and are likely to develop corrosion, so oil-based paints with a high protective function are most frequently used. While “sick house” syndrome, chemical sensitivity and VOC (volatile organic compounds) have become a focus of public concern, a shift from oil-based paints to water-based paints is rapidly in progress. In response to this situation, Nippe Home Products Co., Ltd. has launched “Water-based Woody Guard,” an eco-friendly water-based stain for wooden structures that offers functionality and quality comparable to that of oil-based paints. In addition to advantages such as handling ease and odorless qualities that water-based paints offer, “Water-based Woody Guard” can protect wooden structures from insects, corrosion and algae, while also being

highly water-repellent.

Made from the company’s proprietary micron-particle composite resins and pigments, this water-based paint permeates deeply into wood to prevent corrosion and deterioration from the inside. A thin coating film is also formed on the wood surface to provide extra protection against wood degradation.

### ►High Penetration Capability Surpassing Oil-based Paints



## Powdax Kino No. 3 SC—Self-cleaning Powder Coating with Reduced Need for Cleaning

Powder coatings consist of only a film-forming ingredient without organic solvents or water. Completely free from VOCs, powder coatings can be collected and recycled. Because they generate less industrial waste, powder coatings are highly acclaimed as environmentally benign coatings.

Nippon Paint offers a wide range of powder coatings for various industrial products.

The “Powdax Kino No. 3 SC” coating film has a superior hydrophilic property that enables it to be easily cleaned even when getting dirty. Owing to this self-cleaning feature, “Powdax Kino No. 3 SC,” when coated on guard rails, makes it possible to

reduce the frequency of cleaning remarkably compared with conventional coatings. Because this self-cleaning property is a beneficial feature for many other applications as well, Nippon Paint aims to expand the technology for various other products.



“Powdax Kino No. 3 SC” coating  
(left part of guard rail)

## COLUMN

### Environmentally Friendly Electrodeposition Coating with High Throw Power Receives the 57th JSAE Technology Development Award

In May 2007, Nippon Paint, together with the Mazda Motor Corporation, received the Technology Development Award from the Society of Automotive Engineers of Japan, Inc. (JSAE). The award was in recognition of the development and commercialization of an environmentally friendly electrodeposition coating with high throwing power. JSAE Award was established in 1951 for the purpose of promoting the development and advancement of automotive engineering and technology.

The Technology Development Award is presented to individual members and associate developers who have developed new products or technologies over the past three years that have contributed to the development of automotive technology. It is considered to be a very honorable award among engineers engaged in automobile production. Throughout the award’s history, winners in the field of paints and coatings have been very few. In fact, this is the first time that a paint manufacturer has won the award as an associate developer.



Participants at the 57th JSAE award ceremony held in Pacifico Yokohama convention center on May 24, 2007. Shown are Mitsuo Yamada in charge of ED Technical, Automotive Coatings (center); Mr. Tsutomu Shigenaga (right) and Toshihiro Yoshida (left) of Mazda Motor Corporation.