

26 April, 2021

# DIC Corporation

## DIC Group Develops Cobalt Free and Environment-Friendly Driers for Coatings and Inks




**Tokyo, Japan**—DIC Corporation has developed a drier agent that expedites the drying of coatings and printing inks by accelerating oxidative polymerization without cobalt compounds.

Compliant with European environmental regulations, DIC has begun shipping samples through group company Sun Chemical Corporation, based in New Jersey (U.S.A.), and its European affiliates of the new drier as part of its *DICNATE* series to coatings and printing manufacturers across Europe. DIC will focus marketing efforts on that region moving forward with a target for annual sales of *DICNATE* of ¥1.0 billion by fiscal year 2025.

Driers are metal carboxylates that are mixed into coatings and printing inks to hasten curing and drying of coated and printed materials. While cobalt driers are commonly used, cobalt compounds have come under public discussion due to their effects on health and environment. Accordingly, demand for cobalt-free alternatives has continued to increase, particularly in Europe.

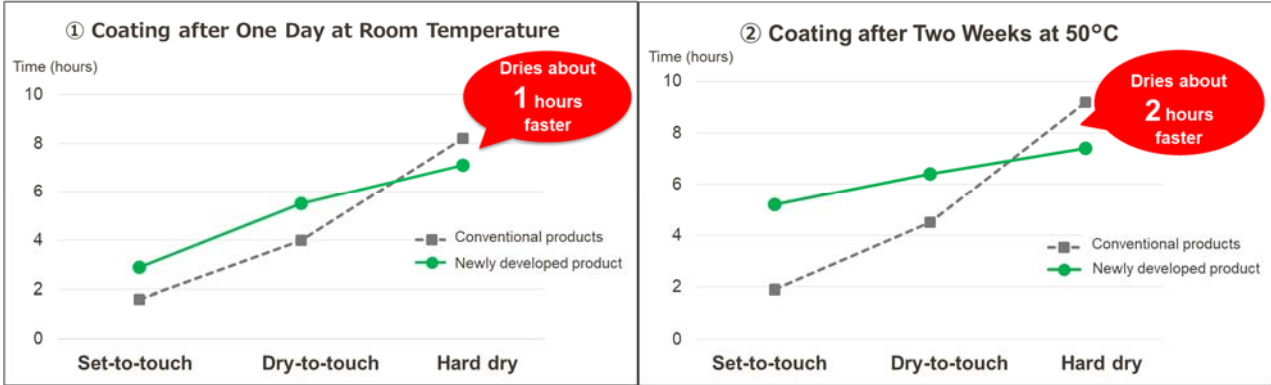
DIC sought to develop health and environment-friendly driers that satisfy the requirements of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)\* and which bear GHS pictograms. The new product, which can be used with both coatings and printing inks, is made with manganese, the health hazards of which are minimal. The new drier, *DICNATE* ESG-130BZ, is for coatings. *DICNATE* MV130A drier is for coatings and inks and uses sustainable vegetable-based esters as solvents.

### GHS Pictograms

	Conventional cobalt driers	Newly developed ( <i>DICNATE</i> ESG-130BZ)	Newly developed ( <i>DICNATE</i> MV130A)
Principal applications	Coatings and inks	Coatings	Coatings and inks
GHS pictograms			

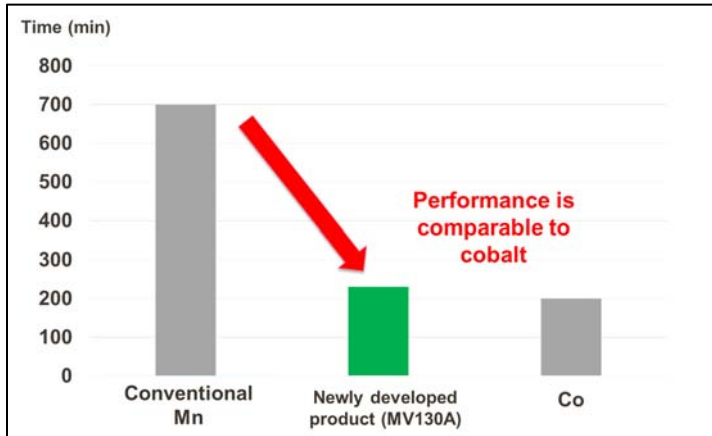
Tests conducted in DIC laboratories confirm that the drying performance of *DICNATE* MV130A used with alkyd coatings or sheetfed offset printing inks is equal to or better than that of cobalt driers.

**Drying Performance of *DICNATE* and a Conventional Drier Used with an Alkyd Coating**



Test conditions: 25°C, 50%RH; measured using a drying time recorder.

**Evaluation of Drying Performance of *DICNATE* MV130A Used with Sheetfed Offset Printing Ink**



Test conditions: 35°C, 50%RH; identical metal content of drier added in all three examples.

“We look forward to the expansion of sales of this new product helping to reduce the impact of driers on the environment.” said Satoshi Hashi, Product Manager of Performance Materials Product Division, DIC Corporation. “DIC will continue to promote product development in partnership with Sun Chemical to better meet the needs of DIC Group customers.”

“In partnership with our parent company DIC Corporation, we are proud to offer these unique, environmentally-friendly new driers to our customers.” said Dr. Stefan Hellwig, Business Development and Technical Service Manager, Advanced Materials, Sun Chemical Corporation. “To support our continued focus on sustainability, these new driers offer highly effective drying performance at low environmental and health impact to satisfy the most urgent market needs.”

Guided by its DIC111 medium-term management plan, the DIC Group is working to provide environment-friendly, high-performance offerings with the aim of both contributing to society and achieving sustainable growth. Going forward, the Group will continue to supply highly functional products that meet the needs of customers in the market for printing inks and coatings, thereby expanding the global scale of this key business.

\* The GHS is an internationally agreed-upon system for consistently classifying and clearly labeling the hazards of chemical products, thereby helping to prevent accidents and protect people.

– Ends –

## Reference:

Metal carboxylates: <https://www.dic-global.com/en/products/metal/>

## Related press release:

**DIC Develops Quick-Acting Drier for Coatings and Printing Inks** (June 15, 2020)

<https://www.dic-global.com/en/news/2020/products/20200615093447.html>

## About DIC Corporation

DIC Corporation is one of the world's leading fine chemicals companies, with top shares of the global printing inks, organic pigments and polyphenylene sulfide (PPS) compounds markets. Established in 1908 as a manufacturer of printing inks, DIC has capitalized on its capabilities in organic pigments and synthetic resins to build a broad portfolio of products for diverse industries, including automobiles, electronics, food and housing. DIC is also the core of the DIC Group, a multinational organization with operations in more than 60 countries and territories worldwide.

Website: <http://www.dic-global.com/en/>

## About Sun Chemical Corporation

Sun Chemical, a member of the DIC Group, is a leading producer of printing inks, coatings and supplies, pigments, polymers, liquid compounds, solid compounds and application materials. Together with DIC, Sun Chemical has annual sales of more than \$7.5 billion and over 20,000 employees supporting customers around the world. Sun Chemical is a subsidiary of Sun Chemical Group Coöperatief U.A. in the Netherlands and is headquartered in Parsippany, New Jersey, in the United States.

Website: [www.sunchemical.com](http://www.sunchemical.com)