

# Mold release agent **DAIFREE MS-600**

**TECHNICAL DATASHEET** 

DAIFREE MS-600 is a new solvent -based fluorocarbon mold release agent.

It is semi-permanent type. It shows enhanced performance for rubber products and resin. It also meets environmental regulations.

#### Introduction

- High durable effective release performance with fluorocarbon as the principal ingredient.
- **PFOA and PFOS free\*** and complies with environmental regulations such as TSCA and RoHS. \*≦5ppb detection limit.
- Little transfer, no stickiness left on the mold product.
- Minimal mold contamination is produced, reducing mold -cleaning requirements and improving productivity.

## General physical properties—Product\*1

Items	Data
Appearance	Colorless liquid
Specific gravity	0.8(25℃)
Solid component	1.5 mass %
Principal solvent	IPA
Recommendable dilution ratio	1-5 times
Fire Service Act	Flammable
Recommendable diluting solvent	IPA, petroleum solvents

<sup>\*1</sup> The above values are representative and not guaranteed.

## **Application**

- Rubbers ; SBR, NBR, EPDM, FKM, CR, ACM, etc. Thermosetting resins ; Epoxy, Unsaturated polyester, Phenol, etc.

- Thermoplastics ; PE, PP, PVC, ABS, etc.

## Method of use

#### (1) Dilution

- Use the agent straight or dilute with recommendable solvent appropriately, and agitate it until uniformly mixed.
- Part of the ingredients may settles out when it is used under 15℃. In that case, gradually heat it up to around 25°C and agitate it before use.
- Curing process;  $150^{\circ}C-180^{\circ}C \times 30-10$  min.

## (2) How to apply

- Before using the product for the first time, remove the old release agent completely. Use the steps in '(2) Cleaning the mold' below to clean correctly.
- Apply a uniform coating film using an air spray device or rag.

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- When spraying onto a mold, spray the mold release agent lightly with a few passes over the mold.
- It is more effective to apply a few thin coating films of low concentration of the agent than to apply a single thick coating film of high concentration.
- Be sure to use an appropriate amount of the agent since use of an excessive amount may result in mold contamination.

## (3) Cleaning the mold

- Slight contamination of the mold release agent can usually be removed to a certain degree by wiping with a solvent (IPA, toluene, acetone).
- Alkaline cleaning agents are effective for complete removal. (Immerse in an approx.. 10% aqueous solution of potassium hydroxide or sodium hydroxide to which a small amount of surfactant has been added. The cleaning solution should be at a temperature of 60-80°C)

#### Use temperature range

From room temperature to 300℃

## **Handling / Safety information**

- Be sure to read the Safety Data Sheet (SDS) and precautions on the label before using.
- This product has been developed for industrial purposes and we shall not guarantee the the safety if used for any other purposes. If it is going to be used for medical or food applications, please contact us in advice.

#### Package size

- 13 kg

For more information, visit our website.

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https://www.daikinchemicals.com/