

# Mold release agent DAIFREE GW-4510

TECHNICAL  
DATASHEET

**DAIFREE GW-4510 is a new water -based fluorocarbon mold release agent that does not contain silicone. It shows enhanced performance in comparison to Daikin’s previous product GW-251 for resin materials, especially for FRP products. It also meets environmental regulations.**

## Introduction

- **Highly effective release performance** with fluorocarbon as the principal ingredient. A thin, even film is produced, making it ideal for the release of precision components.
- **PFOA and PFOS free\*** and complies with environmental regulations such as TSCA and RoHS.  
\* $\leq 5$ ppb 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\*<sup>1</sup>

Items	Data
Appearance	Pale yellow or yellow liquid
Specific gravity	1.00 (25°C)
Solid component	10 mass %
Principal solvent	Water
Recommendable dilution ratio	1 - 50 times
Fire Service Act	Non-flammable
Recommendable diluting solvent	Water (tap-water, ion-changed water)

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

## Application

- Thermosetting resins ; Epoxy, Unsaturated polyester (FRP) , Phenol, etc.
- Thermoplastics ; PE, PP, PVC, ABS, etc.
- Rubbers ; SBR, NBR, EPDM, FKM, CR, ACM, etc.

## Method of use

### (1) Dilution

- Use the agent straight or dilute with water appropriately, and agitate it until uniformly mixed.

### (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.
- 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 200°C

### 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 safety if used for any other purposes. If it is going to be used for medical or food applications, please contact us in advance.

### Package size

1kg (10 bottles / 1 carton), 15kg (Plastic drum)

For more information, visit our website.

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