

# Aluminum die casting release agent

## ● Performance Overview

Maxtop Aluminum die-casting release agent (MTADCRA) is refined from long-chain alkylaryl silicone oil as the base oil, with the addition of various surfactants, preservatives, bactericides and PH regulators. A uniform and dense isolation film is formed by using the compounding technology of high-temperature resistant synthetic oil and composite additives. Effectively prevent the adhesion between the casting and the mold, and significantly improve the demolding efficiency and the surface quality of the casting. Meanwhile, its excellent lubrication performance reduces mold wear and extends mold service life, making it suitable for the production of aluminum castings with complex geometries and high gloss requirements.

## ● Features

### 01

Good high temperature lubrication performance, can make die castings smooth and shiny.

### 02

It does not contain powder and does not require frequent mold disassembly and repair, which can extend the mold life and save work hours.

### 03

There is no corrosion to castings and mold equipment. The casting products have clear outlines, smooth and traceless surfaces, and do not affect painting.

### 04

The volatile substances are smokeless, non-toxic, do not pollute the environment, and do not harm the health of operators.

### 05

The dilution ratio with water is high. It can be diluted with water at 1:80~200 times according to different equipment and process requirements. do not affect painting.



## ● Application Scenario

1. Core process adaptation  
High-pressure die-casting: Complex thin-walled parts such as automotive engine cylinder heads, transmission cases, and wheels.  
Low-pressure/gravity casting: motor housings, radiator brackets, architectural aluminum profiles.
2. Coverage of typical industries  
Automobile parts: Battery trays and structural components for new energy vehicles.  
3C electronics: Notebook computer casings, mobile phone frames.  
Lighting industry: LED heat sinks, street lamp housings.  
Aerospace: Precision instrument brackets, lightweight components.
3. Mold material matching  
H13 steel molds, cast iron molds, and copper alloy hot working molds.

# Aluminum die casting release agent performance indicators

Project	Quality indicators
Oil-based appearance, 15~35 °C	Milky white uniform liquid
Emulsion pH	7.5~8.5
Water ratio	1:80-200times


