

## Introduction

Mantherm K3 is a fully synthetic thermal oil specifically developed for gas-phase heat transfer at lower temperatures than fluids composed of traditional diphenyl ether/biphenyl.

## Benefits

- The boiling point of Manto Mantherm K3 is 243°C, and laboratory thermal stability testing recommends a continuous operating temperature of 330 ° C for liquid or gas phase. The crystallization point of 2°C makes Mantherm K3 easy to handle and may eliminate the need for expensive heat tracing in mild climates.
- The odor of Manto Mantherm K3 is higher than that of other gas-phase organic heat transfer fluids. Mantherm K3 is a mixture of phenylcyclohexane and dicyclohexyl, which contains almost no biphenyl.

## Typical Properties

PROPERTY	TYPICAL VALUE
Kinematic viscosity @40°C	2.04 cSt
Maximum oil film temperature	360°C
Boiling point	243°C
Crystallization point	2.4°C
Flash point (O.C.)	104°C
Autoignition point	360°C
Coefficient of thermal expansion	0.001204/°C
Density @20°C	933 kg/m <sup>3</sup>
Acid value	< 0.2 mgKOH/g
Average molecular weight	161
Moisture content	≤150 ppm
critical temperature	406°C
critical pressure	558.4 psia

The above experimental data is from standard samples, and there may be slight differences in data for different batches of products. Please consult our technical support for detailed information.

1	2024/11/19	New version released (A/0)	Jevin Ryu
<b>NO.</b>	<b>Date</b>	<b>Correction items</b>	<b>Reviewer</b>