

TC-3283 is a fluorinated fluid designed to replace 3M 3283. It is a colorless and transparent perfluorocarbon (PFC) that is an inert dielectric with excellent thermal transfer properties, very low surface tension, and excellent compatibility. TC-3283 can be widely used in various temperature control cooling systems.

TC-3283 has a variety of uses, mainly as a thermal transfer fluid in semiconductor manufacturing.

- LED chips
- Etching Equipment
- Ion Implantation equipment
- Test Equipment and IC Testing
- **Other uses:** phased array radar cooling system, emersion cooling, high performance computer cooling as well as a variety of heat pipe uniform heat plate catalytic expansion plate radiator, biomedical products equipment temperature control, etc.

Property	Value
CAS:	86508-42-1
Coolant Range	-55 ~100°C
Pour Point	-93°C
Boiling Point	130°C
Density g/ml	1.626
Vapor Pressure kPa @ 25°C	0.98
Kinematic Viscosity (HE), cSt	1.216
Dielectric strength 2.54mm gap KV	40.1
Specific heat capacity KJ/Kg-K	1.19
Heat of vaporization KJ/Kg	144
Dielectric constant 1kHz	9.5
Thermal conductivity w/mc	0.063
Surface tension mN/m	18.8
Refractivity	1.279
GWP	>10K
ODP	0

Dielectric High-Performance Chemicals

Inert dielectric perfluorinated heat transfer fluid for use in:

- Semiconductor manufacturing
- Pharmaceutical manufacturing
- Chemical manufacturing
- Vapor phase heating
- Transformers
- Recirculating chillers
- Computer cooling

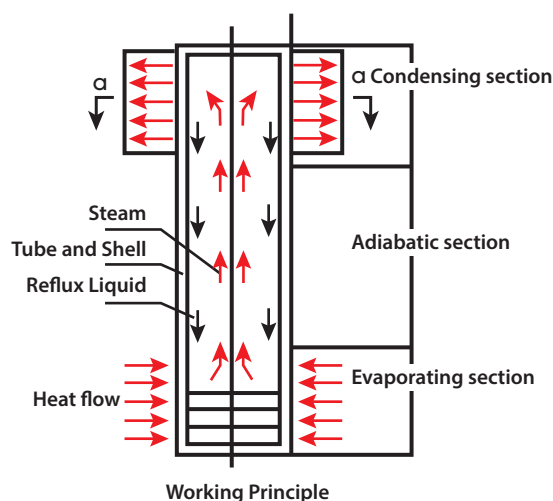


Product features:

- Good fluidity, can flow well in the temperature control system to dissipate heat.
- Excellent electrical insulation and thermal conductivity.
- Very moderate boiling point, there is an evaporation process in the working process, using the heat of evaporation to take away heat: it can ensure the stable and normal work of the heating parts.
- Chemically inert and thermal stable, can be widely used in a variety of temperature-controlled heat dissipation processes.
- Good material compatibility, non-reactive with most metals, plastics and polymers.
- Non-explosive, no flash point of combustion.
- Very low surface tension, high permeability.
- Good fluidity, flows well in the temperature control system to dissipate heat.
- Non-toxic, non-hazardous and non-irritating.



Schematic diagram and characteristics of the product working in the heat pipe.



Schematic diagram and characteristics of products working in semiconductor dry lithography.

