caltherm®

Heat Transfer Fluids

Application Pharmaceutical Processing



About Caltherm

Caltherm® is a Caldic brand. Caldic is one of the world's leading full-service value-add solution providers for the premium life science and specialty chemicals markets. Our extensive range of high-quality thermal fluids have been developed using cutting-edge technology, and are based on the latest generation of mineral oils, synthetic oils and silicone-based oils.

Offering excellent compatibility and seamless blending properties, Caltherm products can be smoothly incorporated into virtually any processing environment as an alternative or tailor-made heat transfer fluid. While capable of handling temperatures as low as -100 °C up to a high of +400 °C, Caltherm's reliable solutions fulfill efficiency, operational and safety needs and simultaneously address regulatory and environmental requirements.

The Caltherm product range provides solutions for use across processing industries, including pharmaceutical, food, chemical, oil & gas, solar power, and more. Whatever the set-up of your processing installation, choosing one of Caltherm's solutions, whether an existing formulation or one customized to your situation, will be a valuable investment for the future.

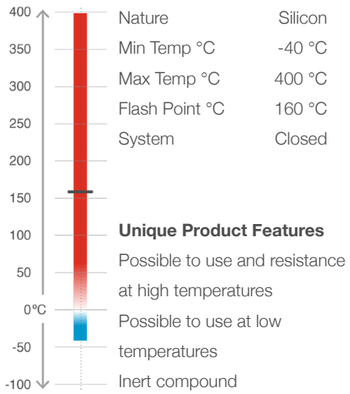


Why choose Caltherm?

- Extensive range of high-quality thermal fluids
- Over 30 years expertise in HTF solutions
- Technical expertise on installation and reactivity issue between fluid and manufactured product
- Chemical fluid analysis with on-site testing leading to a diagnostic solution
- Thorough pre-cleaning of processing plant to ensure maximum effectiveness
- Future-proofing approach, including technical needs and regulatory support
- Solutions that are tailor-made for you and your challenge
- Alignment with all business units within your company
- Supports financial proposals and investments
- Service-oriented and personal approach
- Excellent aftercare services, today, tomorrow, and in the future

Caltherm pharmaceutical processing solutions

Caltherm 400
Fluid for high temperature and low viscosity



Nature	Silicon
Min Temp °C	-40 °C
Max Temp °C	400 °C
Flash Point °C	160 °C
System	Closed

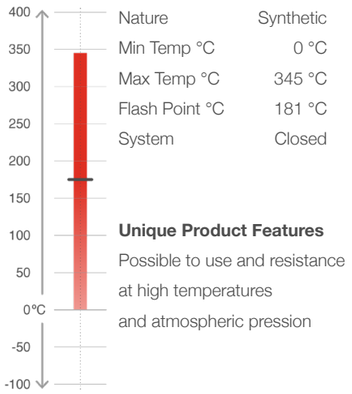
Unique Product Features

Possible to use and resistance at high temperatures

Possible to use at low temperatures

Inert compound

Caltherm C66
Synthetic fluid for very high temperature application

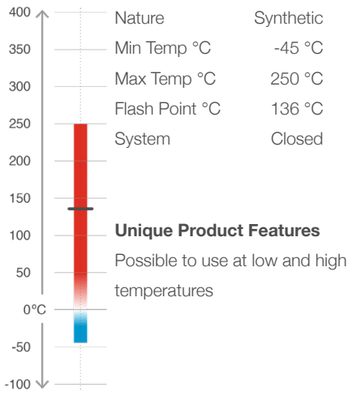


Nature	Synthetic
Min Temp °C	0 °C
Max Temp °C	345 °C
Flash Point °C	181 °C
System	Closed

Unique Product Features

Possible to use and resistance at high temperatures and atmospheric pression

Caltherm CADX10
Synthetic fluid for extreme temperatures applications

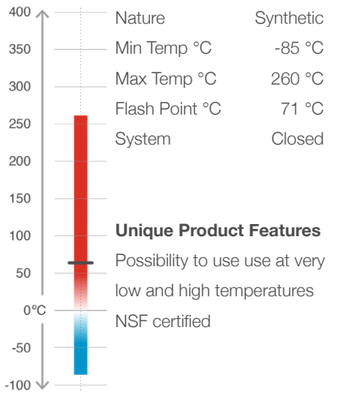


Nature	Synthetic
Min Temp °C	-45 °C
Max Temp °C	250 °C
Flash Point °C	136 °C
System	Closed

Unique Product Features

Possible to use at low and high temperatures

Caltherm CD12
Synthetic fluid for cold and warm application



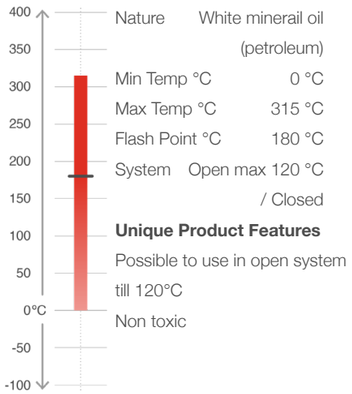
Nature	Synthetic
Min Temp °C	-85 °C
Max Temp °C	260 °C
Flash Point °C	71 °C
System	Closed

Unique Product Features

Possibility to use use at very low and high temperatures

NSF certified

Caltherm CXP
Paraffin based fluid for warm system



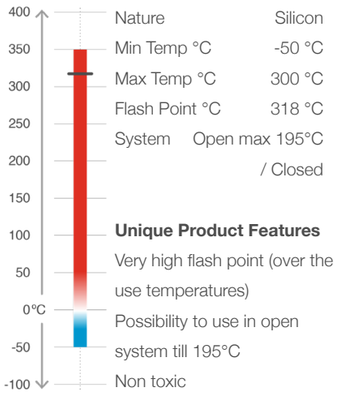
Nature	White minerail oil (petroleum)
Min Temp °C	0 °C
Max Temp °C	315 °C
Flash Point °C	180 °C
System	Open max 120 °C / Closed

Unique Product Features

Possible to use in open system till 120°C

Non toxic

Caltherm S 1050
Fluid for high temperature with very high flash point



Nature	Silicon
Min Temp °C	-50 °C
Max Temp °C	300 °C
Flash Point °C	318 °C
System	Open max 195°C / Closed

Unique Product Features

Very high flash point (over the use temperatures)

Possibility to use in open system till 195°C

Non toxic

Pharmaceutical processing application

The pharmaceutical industry excels at innovation, delivering high standard, precision solutions. As a result, the manufacturing processes are sophisticated and involve phases with high thermal stresses, requiring the use of reliable, high-quality heat transfer fluids.

Caltherm's high-tech thermal fluids are made from mineral, synthetic or silicone products and can replace glycol mixtures to guarantee the system can handle high pressures at high temperatures (for example, 85 bars at 300 °C for water).

The wide range of Caltherm thermal fluids meet pharmaceutical regulatory requirements by offering fluids suitable for either very low or very high temperatures (below -80 °C or above 350 °C) or fluids whose versatility guarantees permanent efficiency from -50 °C to 300 °C.



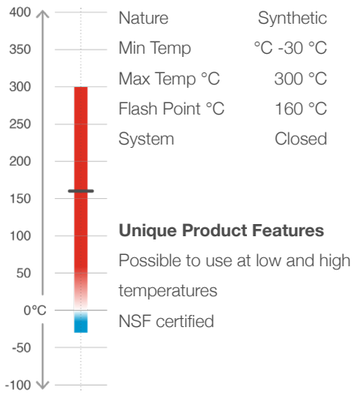


Pharma application success story

In 2015, the Caltherm team was approached by a pharmaceutical manufacturer experiencing technical issues in their production process originally operating between -30 °C and 160 °C. Following Caltherm's standard procedures, our specialist determined a baseline measurement via an objective analysis of the incumbent heat transfer fluid in the pharmaceutical plant. The outcome of the lab analysis showed that the ten-year-old heat transfer fluid had a degreased flashpoint of 120 °C, compared to the original 160 °C. This value was not compliant with the regulations of the pharmaceutical plant.

After a combination of lab analysis and site visits to assess the installation, the Caltherm experts recommended a tailor-made fluid with an initial viscosity close to that of the current fluid, but with a higher flashpoint of 218 °C. They also advised modifying the position and size of the expansion tank as it was too small and not at the highest point of the installation to optimize the systems performances. The thorough analysis and expert guidance ensured the Caltherm solution delivered long-term optimal performance of the customer's pharmaceutical plant for the next 20 years, simultaneously addressing both regulatory and environmental requirements.

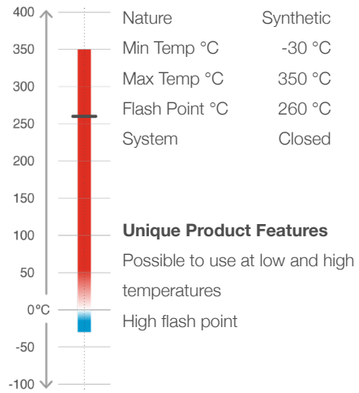
Caltherm SY2FC
Synthetic fluid for mixt temperatures application



Nature	Synthetic
Min Temp	°C -30 °C
Max Temp °C	300 °C
Flash Point °C	160 °C
System	Closed

Unique Product Features
Possible to use at low and high temperatures
NSF certified

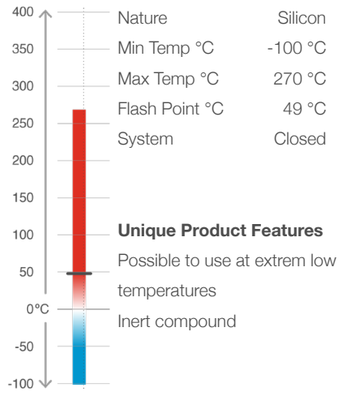
Caltherm SYN FC
Synthetic fluid for high temperature application at very high flash point



Nature	Synthetic
Min Temp °C	-30 °C
Max Temp °C	350 °C
Flash Point °C	260 °C
System	Closed

Unique Product Features
Possible to use at low and high temperatures
High flash point

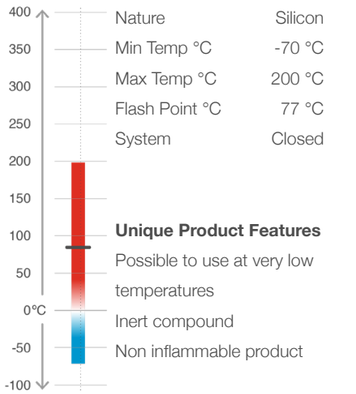
Caltherm UBT
Fluid for extrem low temperature application



Nature	Silicon
Min Temp °C	-100 °C
Max Temp °C	270 °C
Flash Point °C	49 °C
System	Closed

Unique Product Features
Possible to use at extrem low temperatures
Inert compound

Caltherm UBVI
Fluid extreme low viscosity at low temperature and inflammable



Nature	Silicon
Min Temp °C	-70 °C
Max Temp °C	200 °C
Flash Point °C	77 °C
System	Closed

Unique Product Features
Possible to use at very low temperatures
Inert compound
Non inflammable product

Get in contact

The Caltherm team of technical experts, equipped with longstanding experience across several industrial sectors, can develop tailor-made solutions to meet specific installation requirements. Initially, the specialists will determine a baseline measurement via an objective analysis of the HTF currently used in your system. Following this, the outcomes of the lab analysis, combined with a site visit to assess the installation, generate a diagnosis which is the starting point to discuss and recommend a solution that meets your requirements - technical, sustainable, efficient, safety or cost-effective – today, and in the future.

Germany
CALDIC DEUTSCHLAND GMBH
Am Karlshof 10
40231 Düsseldorf

Falk Busse
+49 (0) 211 7346 0
f.busse@caldic.de

Spain
CALDIC IBERICA S.L.
C/ LLobateres 23-35
Polígono Industrial Santiga
E-08210 Barberá del Vallés

Ernest Puch
+34 93 719 25 61
ernest.puch@caldic.es

Italy
CALDIC ITALIA SRL
Via 1° Maggio 34/36/38
I-21040 Origgio (VA)

Valentina Castelli
+39 (0)296 39 01
castelli.valentina@caldic.it

The Netherlands
CALDIC NEDERLAND B.V.
Westerlaan 1
3016 CK Rotterdam

Diederik Derksen
+31 (0)10 4136420
d.derksen@caldic.nl

Sweden
CALDIC NORDIC
Frihamnsallén 7
SE-211 20 Malmö

Peter Feher
+46 (0)723 69 26 76
p.feher@caldic.se

Belgium
CALDIC BELGIUM N.V.
Terlochtweg 1
B-2620 Hemiksem

Jean-Luc Maton
+32 (0)3 870 48 11
jl.maton@caldic.be

France
CALDIC FRANCE S.A.S
Immeuble le Tropical
18 Place des Nympéas
Avenue des Nations
C.S. 90005 Villepinte
95926 Roissy Charles de Gaulle
Cedex

Eric Cousinié
+33 (0)473 775 575
eric.cousinie@caldic.fr

United Kingdom
CALDIC UK LTD. (Chesterfield)
Stainsby Close
Holmewood Industrial Estate
Chesterfield
Derbyshire S42 5UG

Mohan Parmar
+44 (0)1246 854111
m.parmar@caldic.com

Caltherm is a Caldic Brand

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