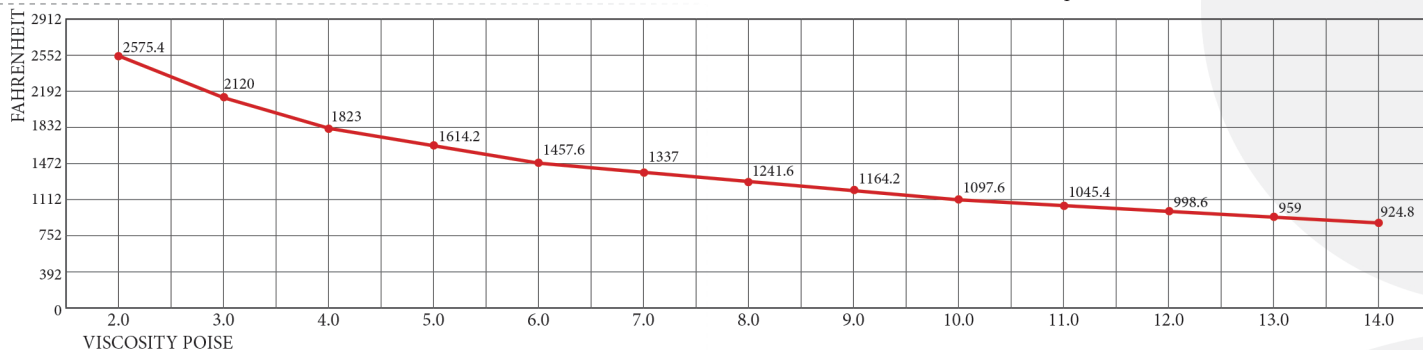


### Chemical Analysis

SiO <sub>2</sub>	Na <sub>2</sub> O	K <sub>2</sub> O	CaO	BaO	Al <sub>2</sub> O <sub>3</sub>
69.0% - 71.5%	12.5% - 12.9%	5.0% - 5.5%	4.0% - 4.5%	2.5% - 3.0%	1.1% - 1.5%
B <sub>2</sub> O <sub>3</sub>	ZnO	SO <sub>3</sub>	Sb <sub>2</sub> O <sub>3</sub>	Li <sub>2</sub> O	Er <sub>2</sub> O <sub>3</sub>
1.0% - 1.5%	0.6% - 1.3%	0.21% - 0.31%	0.2% - 0.5%	0.06% - 0.10%	0.03% - 0.05%

Theoretical value: COE coefficient of expansion 96x10<sup>-7</sup> (+/-2)  
 Practical value: COE coefficient of expansion 68° F - 572° F = 100x10<sup>-7</sup> (+/-2)



### Viscosity

log 10 viscosity POISE	2.0	2.5	3.0	4.0	5.0	6.0	7.0	7.6	8.0	9.0	10.0	11.0	11.5	12.0	13.0	13.3	14.0	14.5
FAHRENHEIT	2575.4	2319.8	2120	1823	1614.2	1457.6	1337	1277.6	1241.6	1164.2	1099.4	1045.4	1022	998.6	959	946.4	923	906.8
	Melting Point			Working Point				Littleton Point				Softening Point			Higher Annealing Point			Lower Annealing Point

### Reheating or Melting

Cristalica100 is pre-molten, which means you do not need to bring the glass to a very high temperature in order to obtain a clear glass.

The working temperature, based on the products that you are creating, will be adapted to a level between 2066-2120 degrees Fahrenheit.

After you have finished work you can directly place the glass cullet into the furnace. Keep the glass over night at a temperature of 2102-2192 degrees.

In some furnaces, it is recommended to reduce the temperature to 1922 degrees, after which you may raise it up again to your working temperature.

You can fill up the crucible in one inlay or divide the amount into three equal parts. This choice depends on the total amount used, as well as on the type of furnace you have.

We recommend a daily fill-up of the furnace with the total amount you need to use the following day.

In the case that you want to add glass cullet from your own production, please introduce it in the furnace with the first inlay of studio glass, because the cullet will create small air bubbles when melted, which will not rise to the surface as fast as the larger air bubbles from in between our studio glass.

### A typical "reheating" scheme

Temperatur		Time	
Minimum	Maximum		
2012	2102	16:00	Working temperature
2102	2174	17:00	
2102	2174	18:00	
2102	2174	19:00	
2102	2174	20:00	
2102	2174	21:00	
2102	2174	22:00	Remelt temperature
2102	2174	23:00	can be same as
2102	2174	0:00	Working temperature
2102	2174	01:00	
2102	2174	02:00	
2102	2174	03:00	
2012	2102	04:00	
1922	2012	05:00	Possibly squeeze the glass under 1922
1922	2012	06:00	
2012	2012	07:00	Raise temperature slowly

### A typical annealing scheme

Fahrenheit	Minutes per step	Degrees down from last temperature	Degrees per Hour
950	30	HALT	0
888.8	90	61.2	40.80
780.8	180	108	36
636.8	120	144	72
356	180	280.8	93.6
	600		
Suitable for blown glass up to 25mm			

Any technical questions are welcome, we intend to answer within 12 hours, do not hesitate to contact us.