

The background of the advertisement features three glass jars filled with chocolate, with the central jar in sharp focus showing a dark, speckled chocolate with a decorative drizzle of lighter-colored chocolate on top. The text is overlaid on this background.

EZtemper
by the Chocolate Doctor

Economical - Easy - Professional

www.EZtemper.com



EZ temper

Operating Manual

Revision 6

January 30, 2015

Table of Contents

Operational safety

Introduction

Set up

Start/stop

Maintenance

 Assembly

 Cleaning

Warranty provisions

Troubleshooting/FAQs

Working formulae

Safe Operation.

The EZ Temper is a low voltage appliance that can be safely used with most power sources.

For use with worldwide outlets you may do one of the following:

Replace the cord that shipped with your appliance with an country appropriate cord

Or

Connect the cord that shipped with your appliance to a country appropriate wall adaptor.

1.DO NOT IMMERSE!

2.Do not disassemble.

3.

Introduction

EZ temper is used to produce a stable form of cocoa butter crystals that can be used to temper:

- bean to bar cocoa mass
-
- chocolate
-
- ganache
-
- meltaways
-
- giandujas

- coloured cocoa butter

We call this stable form of cocoa butter crystals produced by EZ temper "silk".

Pre-crystallization of chocolate requires between 0.1 and 1% of the stable form of cocoa butter crystals in order to set up with the snap and shine and mouth feel associated with well tempered chocolate.

EZ temper will allow you to consistently provide those stable crystals and allow you to work with the chocolate at a higher temperature than usual to ensure increased fluidity and ease of use.

The silk can also be used to pre-crystallize ganaches and other mixtures that benefit from tempering.

Start/Stop

After plugging the unit into the wall socket - insure that the plug from the adapter to the unit itself is also securely in place. Switch on both the fan switch and the power switch on the top of the unit. A light on the switches will indicate that they are on if power is getting to the unit.

Set Up

For best results start with cocoa butter that has been stored at an ambient temperature of 20C to 30C for two or more weeks.

Place a quantity of cocoa butter in the stainless container(s) supplied with the appliance and put the lid on the container.. Each container will hold about 150 grams of cocoa butter depending on the cocoa butter format. You may need to chop the cocoa butter into smaller pieces before putting in the jar. If you anticipate requiring larger quantities of cocoa butter silk for your production - add cocoa butter to two or more stainless containers.

Place the container(s) in the EZ temper. Make sure the unit is turned on and wait until the cocoa butter has attained a silky consistency. This could take up to 12 hours. Stir the resulting mass to remove any lumps. When there are no more lumps in the cocoa butter and it has reached the texture of silk it is ready to be used.

After several days you may notice a bit of melted cocoa butter on the surface, just stir it in, it will not affect the ability of your cocoa butter silk to temper.

Cocoa butter will be approximately 15% form V crystals between 33 and 34° C. The unit will be shipped with a factory set temperature of 33.5 C. Most commercial cocoa butter will achieve the silky texture at 33.5C.

However cocoa butter from cacao that is closer to the equator is harder than that from cacao further away - the cocoa butter used may necessitate adjustments in the temperature.

To change the set temperature on the EZ temper - hit the SET button once and you will see [SP] appear on the top display. Use the up and down arrows to choose the temperature you wish between 33.0 and 34.0 C. Hit the SET button a second time and you will see [S_r] - this is a timer function that should remain at 00.00. If you accidentally set this timer an alarm will sound when the time is reached - the unit has been programmed not to shut off should that happen. In order to stop the alarm simply hit the SET button twice and use the down arrow to return the unit to 00.00. When you hit the SET button a third time your new settings will be applied.

If after 12 hours any lumps have not softened and the cocoa butter has not reached a silky texture you may need to adjust this temperature.

Start with an increase of 0.2° C degrees initially. Check cocoa butter silk texture 4 hours after each adjustment.

If your cocoa butter silk seems too fluid - you may wish to decrease the temperature by 0.1-0.2° C.

If cocoa butter is completely melting you may have been sold cocoa butter that contains non cocoa butter fats. Palm oil and other non cocoa butter fats are liquid between 33 and 34°C.

Use of EZ temper silk

Bring the product you wish to pre-crystallize to a temperature between 28 and 33.5°C, depending on the application, before adding the required amount of silk. Cocoa mass, chocolate, ganache or coloured cocoa butter should be between 32 and 33.5° C, whereas meltaway or gianduja can be closer to 28° C.

Since you are introducing the stable form of cocoa butter crystals you need only wait a minute or so before using your product.

If used to pre-crystallize melted chocolate, the chocolate will remain in temper for as long as the chocolate is not overheated. As it cools you can reheat to the initial temperature without throwing your chocolate out of temper. It will over crystallize as time goes on and you will find that you can push your temperatures higher - up to 34.5 for dark chocolate.

Maintenance

Cleaning

The unit should not be immersed. Spills can be simply wiped with a damp soapy cloth. It is not unusual for cocoa butter crystals to form a film on the black silicone parts of the appliance. This may require wiping on occasion with a warm soapy cloth. Be sure to rinse well.

The stainless grid at the bottom of the unit may be safely cleaned in the dishwasher.

Warranty Provisions

One Year Limited Warranty

EZtemper warrants the Product, against defects in materials and workmanship under normal use for a period of One Year (365) DAYS from the date of purchase by the original purchaser ("Warranty Period").

Under this Limited Warranty, if a hardware defect arises and a valid claim is received by EZtemper within the Warranty Period, at its option and to the extent permitted by law, EZtemper will either

- (1) repair the Product at no charge, using new or refurbished replacement parts or
- (2) exchange the Product with a new or refurbished Product.

In the event of a defect, to the extent permitted by law, these are your sole and exclusive remedies.

A replacement Product or part assumes the remaining warranty of the original Product or ninety (90) days from the date of replacement or repair, whichever is longer.

Instructions- Warranty Service:

To obtain warranty service, you must deliver the Product, freight prepaid, in either its original packaging or packaging providing an equal degree of protection, to the address specified by EZtemper. In accordance with applicable law, EZtemper may require that you furnish proof of purchase details before receiving warranty service.

This Limited Warranty does not cover the cost of returning the Product to EZtemper or vice versa; this is your responsibility.

Exclusions. The Initial Warranty does not include damage to the product resulting from accident, misuse, improper installation or operation, unauthorized or improper repair, replacement or alteration(including

but not limited to repairs, replacements, or alterations made or performed by persons other than EZtemper.), failure to provide proper maintenance, unreasonable use or abuse of the product, or failure to follow written installation or operating instructions. Water damage is not covered on warranty. Buyer must return the product's record of purchase to EZtemper within 365 days of the date the product is shipped by EZtemper to Buyer in order to make a claim under the Initial Warranty.

Shipping. Buyer will arrange and pay for shipping and handling charges for the unit to be returned to EZtemper. EZtemper will arrange and pay for shipping and handling for the return of the unit to the Buyer.

Important Shipping Notice

Your return goods (for repair or refund) must be shipped through your local Post Office, (For example, USPS in the US, Canada Post in Canada, Royal Mail in UK, ... etc). Suggest you use standard service to save shipping costs.

Any goods shipped using UPS, FEDEX, DHL or other courier companies will not be accepted and will be returned to sender.

If the parcel is delivered inadvertently, any resulting payment invoiced by the above express courier companies will not be paid and your returned goods will not be repaired and returned.

When returning items to us, please use your local post office to ship it and declare the contents of your package as

"Return to Manufacturer for repair, NCV (No Commercial Value)".

Troubleshooting/FAQs

System will not turn on:

Check power plug and breakers.

Cocoa butter is melted at set temperature

Cocoa butter may be contaminated with other fats - use only reliable brands of pure cocoa butter.

Working Formulae

1. Tempering Chocolate

Add 1.0 percent (by weight) of cocoa butter silk to melted chocolate that has been cooled to 33.5° C or even a degree or two cooler. A little experimentation will be required to determine the appropriate percentage for the chocolate you are using. You may find that you can go as low as 0.5% of the EZ temper silk.

If you are tempering a large quantity of chocolate - for example using the EZ temper silk to seed a 10 kg wheel unit - remove a small quantity of the appropriate temperature chocolate from the machine into a bowl and stir the EZ temper silk into this smaller amount before adding it back into the mass.

2. Tempering Ganache

A ganache that is tempered is more stable, can be cut within a couple of hours of production and will not separate. It will be smooth and creamy, it will melt uniformly in the mouth and will not be grainy (add reference to article by Greweling - http://courses.ecolechocolat.com/objects/pdf/ganache_formulation.pdf)

After emulsifying your ganache, at a temperature anywhere between 28° and 33° C— add 0.5 to 1.0% of the weight of the ganache of EZ temper silk and mix in thoroughly. The ganache may now be poured into a frame and cut as soon as it has set up (which may be as little as an hour or two). Ganache may be piped into shells when it is between 28 and 30° C.

3. Tempering Meltways

Meltway mixtures become quite fluid after the coconut oil is added to the chocolate - making it very challenging to temper them. Untempered meltway sets poorly and becomes grainy. Because of the fluidity it is difficult to temper on a slab, particularly if you are working with large quantities.

Add between 1.0 and 2.0 percent of the weight of the meltaway recipe of EZ temper silk to the mixture when it is between 26 and 33° C then pour into frame. Once cooled and set it is ready to be cut - this can be within as little as 1 hour depending on your starting temperatures.

4. Tempering Gianduja

Either for tempering mass produced or your own giandujas - EZ temper silk can be the solution to a challenging issue.

The use of between 0.5% and 1.0% of the weight of gianduja of EZtemper silk added to the the gianduja between 26 and 33° C will achieve good temper and allow you to cut your gianduja slab as soon as it has set - often as little as an hour.

Melted milk chocolate 1000 grams, hazelnut paste 450 grams - cool to between 26 and 33° C degrees, incorporate 8 to 14 grams of EZ temper silk, pour into frame or mold. Cool until firm. Can be cut on guitar or by hand as soon as firm.

5. Tempering Bean to Bar Cocoa Mass

Cool mass to between 33 and 34° C - add 0.5 to 1.0 percent EZtemper silk. Stir for 1 minute. The pre-crystallized mass may now be pumped into buckets or molds.

Technical Specifications

EZT is a low voltage 12VDC appliance that is electrically safe to use worldwide.

Model number : EZT-5E

Max current 12VDC 6.0A 60W

AC/DC switching power adaptor:

Input: 105/250VAC 50/60Hz

Output: 12VDC 6.67A 90W

Approvals: UL/CUL/TUV/FCC/CE

Model: Meanwell GS90A12—P1M