



2-part Silicone Adhesives in Cartridges

Information regarding GE 2-part silicone in Co-Axial cartridges

Cartridges

GE UltraGlaze* and RapidStrength* 2-component products are packaged for use in co-axial cartridges (CTG) with a central core of *Catalyst* (part B) surrounded by the *Base* (part A) material. Upon dispense the material must travel through a series of mixing elements to achieve proper mixing. Cartridges are supplied 15 to a box with 15 mixers included. Each cartridge contains 12.8 fluid oz. (380ml) yielding about 11 usable oz. (325ml). NOTE: Cartridges are not returnable to Momentive. If unplanned, expect longer lead times when ordering. Contact your Momentive Sales representative for ordering information.



Cartridge Identification:

SSG4650 black → Product code: SSG4650 Black CTG, SAP# 146244

- Contains: UltraGlaze* SSG4650A base & SSG4603B catalyst

SSG4650 grey → Product code: SSG4650 Grey CTG, SAP# 146231

- Contains: UltraGlaze* SSG4650A base & SSG4607B catalyst

SSG4600 black → Product code: SSG4600 Black CTG, SAP# 92601

- Contains: UltraGlaze* SSG4600A base & SSG4603B catalyst

SSG4600 grey → Product code: SSG4600 Grey CTG, SAP# 101329

- Contains: UltraGlaze* SSG4600A base & SSG4607B catalyst

SSG4400 black → Product code: SSG4400 Black CTG, SAP# 57318

- Contains: UltraGlaze* SSG4400A base & SSG4400B catalyst

SSG4400 grey → Product code: SSG4400 Grey CTG, SAP# 57449

- Contains: UltraGlaze* SSG4400A base & SSG4710B catalyst

RGS7700 black → Product code: RGS7700 Black CTG, SAP# 138994

- Contains: RapidStrength* RGS7700.02A base & RGS7703B catalyst



Product Handling and Safety - Safety Data Sheets (SDSs) are available @ www.momentive.com

Storage of Cartridges

The cartridges are sensitive to heat and should always be properly stored until ready for use. Longer-term storage under air conditioning (or freezer) is recommended; store at or below 70°F (21°C). Prolonged exposure to higher temperatures may decrease shelf life. Expect slower flow of the material under cooler temperatures. Warming cartridges to room temperature prior to dispensing will improve flow rate.

Static Mixers

Disposable static mixers are used with the cartridges to provide proper mixing of the product. Static mixers with 30 spiral elements are supplied with the cartridges which provide for a uniform and suitable mix quality. Mixers with less than 30 spiral elements may not always yield a visually acceptable mix quality (even though full adhesion and mechanical properties of the rubber are typically achieved). In addition, a metal sleeve can be used over the static



mixers to prevent swelling of the static mixer shaft under pressure which may improve visual mix quality. The cartridges are shipped with 30-element stepped outlet mixers (see Addendum).

Dispensing Tools

These cartridges require specialized application/dispensing tools and suitable static mixers to properly dispense and mix the product combination contained within. Only pneumatic and cordless guns are effective for use with these cartridges and manual (hand-operated) equipment is neither effective nor acceptable. The addendum of this document contains information related to several dispensing tools/guns that are available for use with these specific cartridges.

Operation of Dispensing Equipment

- It is recommended that users familiarize themselves with the dispensing equipment being utilized. Contact the dispensing tool manufacturer for applicable operating instructions.
- When using pneumatic equipment, sustained air pressure below 80 psi (5.5 bar) may not always produce desirable results in mix quality and/or flow.
- Where applicable, take note of maximum pressure allowed for use on the device.
- Regulated air-pressure may be necessary; defer to dispensing equipment supplier.
- Suitable eye protection is recommended when operating dispensing equipment.

Quality Testing

Start of application:

Prior to using cartridges, check one cartridge per box (case) for proper curing by performing a *Snap Time* test and by visual inspection of the mix via a *Butterfly** test. Only after confirmation of correct cure profile and sufficient mix quality should the remaining cartridges in the case be used. Repeat for each case used.

*Reference Momentive Quality Control document for description of *Snap Time* and *Butterfly* tests and respective product datasheet for *Snap Time* graphs – NOTE: cartridge is a fixed 10:1 volume which corresponds to ~13.5:1 by weight.

Application of Silicone

Start of new cartridge:

From the cartridge filling process, it is possible that both materials in the front end of the cartridge are not filled to same level. Due to this possibility, and in order to minimize waste and to achieve uniform mixing, a small amount of product must be extruded prior to attaching the static mixer**. This is done by dispensing a small amount of material until both base & catalyst are observed exiting the cartridge (step 8, 9). Wipe the materials flush with the exit rim and then attach the static mixer. Begin dispensing until the material exiting the static mixer appears fully mixed and of uniform color (typically 2-3 ounces (60-90 ml) of material is sufficient), then use remainder of material into the application. If the material is not uniform in color, repeat the process.



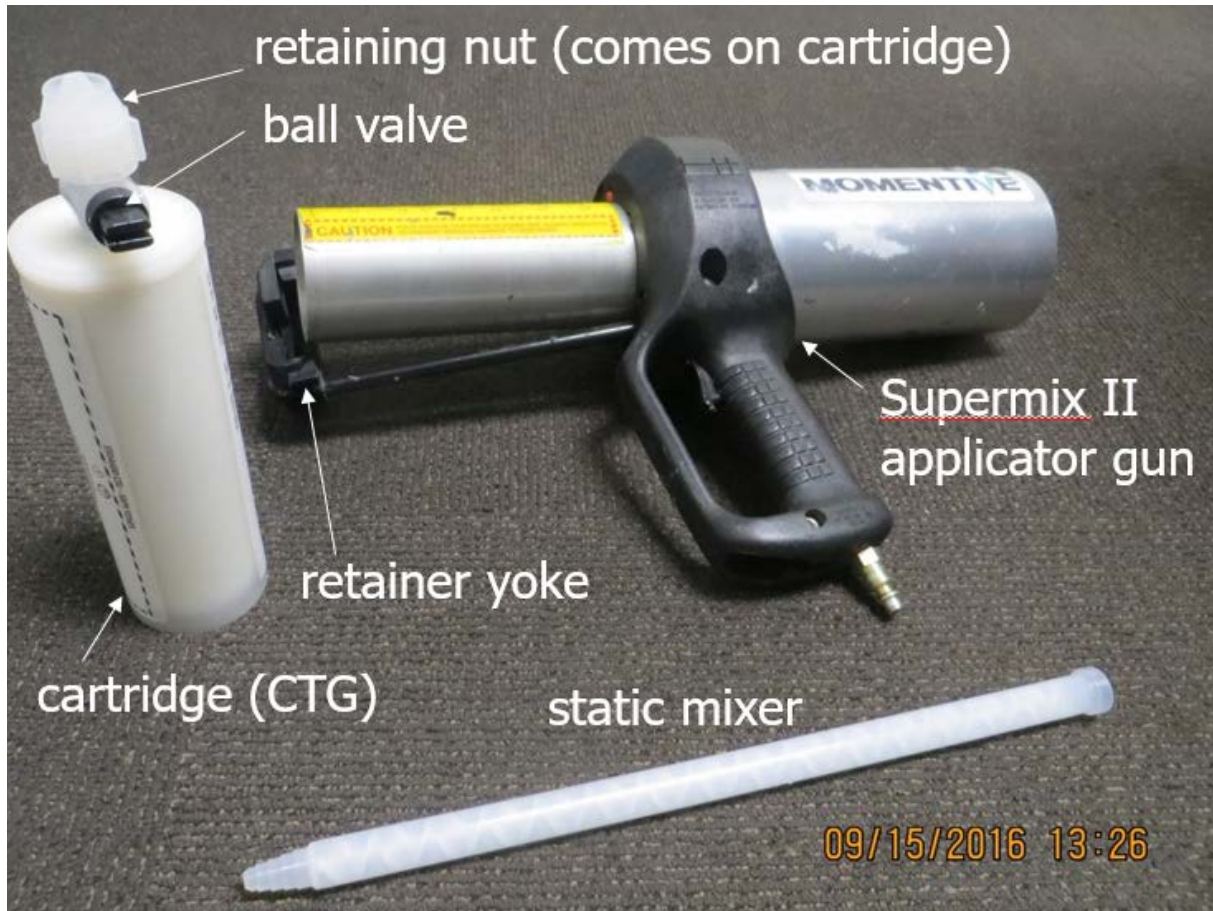
**IMPORTANT: if this step is not performed then the probability of obvious streaking is high.

NOTE: new static mixer must be used with each new cartridge.



Instructions for Loading Material

The follow photographs are specific to the SX gun, and for the most part are similar to the other pneumatic applicators, however not all steps apply to the cordless gun.





Instructions for Loading Material



Step 1 - insert cartridge (CTG) into SX gun



Step 2 – push CTG fully into gun cylinder



Step 3 – line up ball valve with retainer yoke



Step 4 – snap retainer yoke closed



Instructions for Loading Material



Step 5 – remove retaining nut



Step 6 – turn ball valve 90 degrees into open position



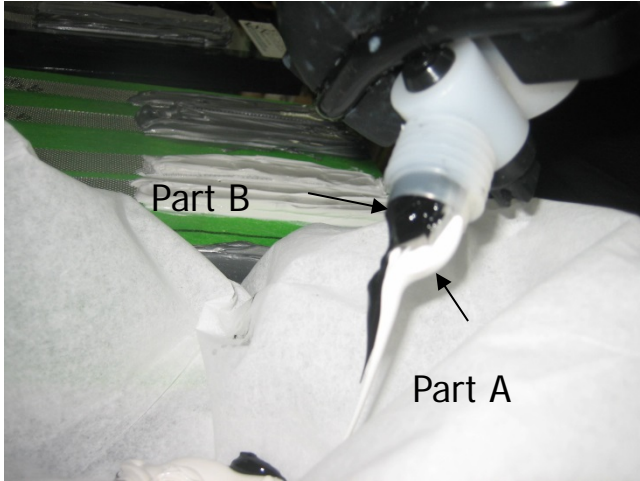
Step 7 – connect to air source



Step 8 – squeeze trigger briefly (over container) until both parts A&B are exiting the CTG



Instructions for Loading Material



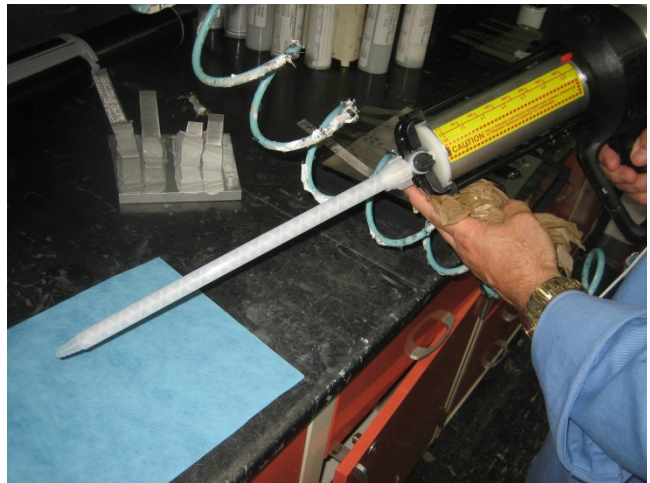
Step 9 – when both parts A&B are beyond the end of the CTG, clean flush with exit rim



Step 10 – place static mixer onto CTG



Step 11 – fasten static mixer to CTG with retaining nut



Step 12 – squeeze trigger to begin dispense



Instructions for Loading Material



Step 13 – dispense ~80 ml of material prior to using in application



Orange indicator should be near 300ml prior to using material

Technical Support

- Contact Momentive Technical Services at any time for assistance.

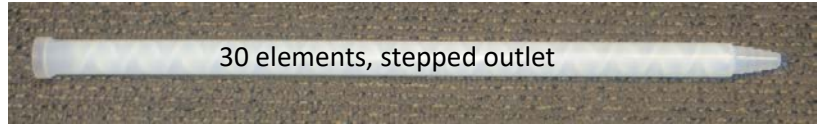
USA East Coast: +1 (518) 791-1040

USA West Coast: +1 (415) 385-4252



Addendum – Static Mixers

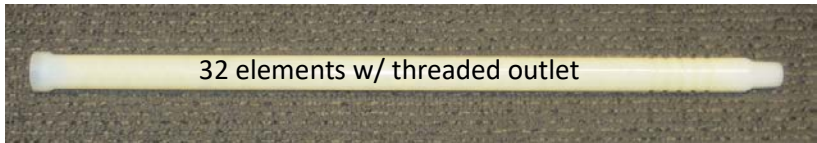
The static mixer that is supplied with the cartridges is a 1/2" φ mixer with 30 spiral elements. It has a stepped end that can be cut to desired diameter. Mixer is 14" long



Alternate static mixers

The following static mixers produce an acceptable mix and may be used in lieu of the mixers supplied with the cartridges.

1/2" φ mixer with 32 spiral elements; threaded end can be used to attach a variety of nozzles. Mixer is 15" long. Part# MT 13-32G-01 (Mixer ø13x32, 13mm ID x 32 mixing element yellow)



Stamixco - 1/2" φ mixer with 32 box elements; stepped end. Mixer is 7.5" long. Part# GFX-10-12



Sulzer SMS High-Flow mixer with 20 box elements + 3 spiral elements. Snap-on extension straw can be cut to suit. Mixer is 10" long. Part# MGQ 14-20+3

All mixers can be sourced from:

- MixtipsUSA – Phone +1 (603) 244-5118 www.mixtips.com

The threaded outlet mixer can also be sourced from:

- Koch's Inc. - Phone +1 (661) 268-1341 customerservice@kochs.com Part# 161-235-2F, 32 elements

The shroud used to contain the mixer is available:



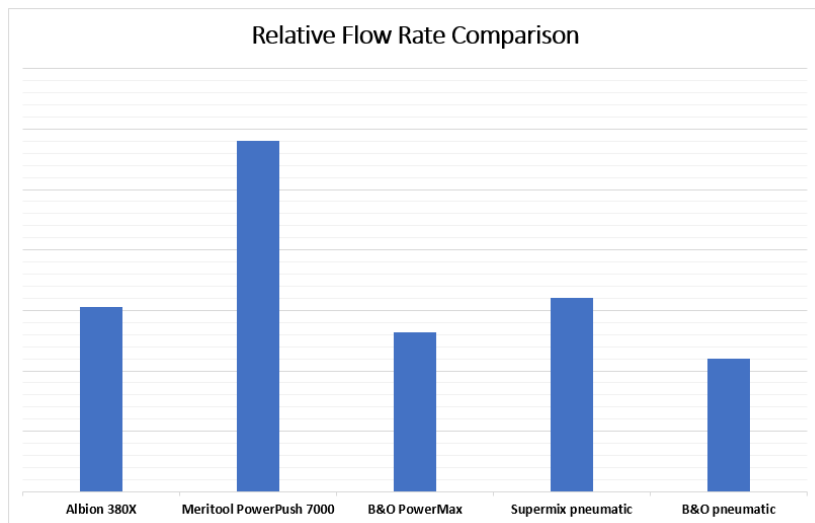
- MixtipsUSA – Part# SH 13-32-09 (Shroud ø13x32, 7/8"-9UNC)
- Koch's - Part# 166-236MD, (7/8" x 9 pitch fits SX cartridge threads; for 32 element mixers)



Addendum – Dispensing Tools

The following equipment is designed for use with these cartridges:

- **Albion E18C380X10 Cordless Dispenser (battery)**
Albion ATC380X10 Dispenser (pneumatic)
Phone: +1 (856) 235-6688 www.albioneng.com
- **Meritool 7000-380C-101 PowerPush (battery)**
Phone: +1 (716) 699-6005 <http://www.meritool.com/>
- **Beyer & Otto B380 C-GE-14.4V (battery)**
Beyer & Otto S380 C-GE-1.2 (pneumatic)
For purchasing contact Jean Ouellette at +1 (819) 328-2823
jcouellette@beyer-otto.ca www.beyer-otto.de
- **SX Gun (pneumatic)**
Can be purchased from PPG Industries, Inc.
Phone: +1 (317) 328-4643 or email rhart@ppg.com
www.ppgaerospace.com
- **Cox A380HP Dispenser (pneumatic)**
COX North America, Inc., Michigan
Must specify 10:1 ratio at time of purchase
Phone: +1 (800) 822-8114,
<https://www.coxdispensers.com/us/cox-products/pneumatic/2-k/418/airflow%E2%84%A2-1-cca-380a>
www.cox-applicators.com



Note: Comparative flow rates shown in graph were generated using maximum recommended tool pressure and/or power setting.