

		1 - PART : BOTTLE			2 - PART : CARTRIDGE / MMD							
RESIN	PR 25	UMA 90	LOCTITE IND405 Clear	CE 221	EPU 40	EPU 41 * Protocol for PAR3CM MMD Refer to course for legacy MMD	EPX 82 & EPX 86FR	FPU 50	MPU 100	RPU 70	RPU 130	SIL 30
STORAGE TEMPERATURE	17 – 25 °C	17 – 25 °C	8 – 21 °C	17 – 25 °C	20 – 25 °C	22 – 25 °C	4 °C	17 – 25 °C	17 – 25 °C	17 – 25 °C	17 – 25 °C	17 – 25 °C
NOTES	Invert bottle 5-6 times to distribute pigment before pouring. Available colors can be mixed.		Filter used resin with 190 µm mesh filter into proper storage container for later use.	-	Incubate for 3 HRS at 40 °C (104 °F) upon receipt. Let cool to room temperature for 4 HRS before use.	Incubate Part A at 40 °C (104 °F) per container type: • 5 L & 20 L – 24 hrs • 180 L & 1000 L – 48 hrs (or up to 7 days)	Remove from cold storage 4 HRS before use.	Stir resin after dispense, when adding resin, and between prints.	Stir resin after dispensing if smokiness is a concern.	-	Incubate for 3 HRS at 40 °C (104 °F) upon receipt. Cartridges can be dispensed right after thawing or at room temperature.	Cox Single-Drive Dispenser: Install cartridge with Part A (gray component) in lower position.
CASSETTE	Standard, C5		Standard, C5	Standard, C5							C5 ONLY	Standard, C5
BURN OFF	-	-	-	10 ml new cartridge	10 ml new cartridge	* 50 g new mixing tip or 24 hrs inactivity	EPX 82 - 10 ml new cartridge EPX 86FR - 10 ml every dispense	10 ml new cartridge	10 ml new cartridge	10 ml new cartridge <i>*varies for MMD</i>	10 ml new cartridge	10 ml every dispense
RATIO	-	-	-	1:1	10:1	* 12.7:1	EPX 82 - 1:1 EPX 86FR - 2:1	10:1	10:1	10:1	4:1	1:1
DISPENSER	COX DUAL-DRIVE	-	-	White Tip, Speed 3	Orange Tip, Speed 3	-	White Tip, Speed 1	Orange Tip, Speed 3	Orange Tip, Speed 1	Orange Tip, Speed 1	Orange Tip, Speed 1	White Tip, Speed 3
	COX SINGLE-DRIVE	-	-	White Tip + Shroud, Speed 1	Orange Tip + Shroud, Speed 1	-	White Tip + Shroud, Speed 1	Orange Tip + Shroud, Speed 1			-	White Tip + Shroud, Speed 1
	ALBION	-	-	White Tip, Speed 2 OR Green Tip [retired], Speed 1	Orange Tip, Speed 1	-	White Tip, Speed 2	Orange Tip, Speed 1			-	White Tip, Speed 2
	MMD	-	-	-	-	* Sulzer STATOMIX® ME 1312- 1032, Pressure 80 psi	-	-	-	RPU 70 only: Sulzer Tip, MFQX, 10-24 (Green)	-	-
POTLIFE	-	-	-	8 HRS			12 HRS	8 HRS	12 HRS	8 HRS		12 HRS
RELEASE FILM RECOMMENDED	Opt.	Opt.	Opt.	NO	Opt.	Opt.	YES	Opt.	NO	Opt.		YES

CASSETTE MAINTENANCE

QUESTIONS? CONTACT US!

Proper cleaning of the cassette is critical to ensure print success!
An improperly cleaned cassette will adversely affect print quality. Clean the cassette after printing, check the cassette before dispensing resin and check the window between prints for window damage or floating parts.

Email: support@carbon3d.com
Phone: 1-650-285-6307 Option 2

		1 - PART : BOTTLE			2 - PART : CARTRIDGE / MMD									
RESIN		PR 25	UMA 90	LOCTITE IND405 Clear	CE 221	EPU 40	EPU 41	EPX 82 & EPX 86FR	FPU 50	MPU 100	RPU 70	RPU 130	SIL 30	
SMART PART WASHER		VF 1 - or - DPM w/ IPA dunk		DPM w/ IPA dunk	Not compatible	VF 1 - or - DPM w/ IPA dunk Gentle Cycle		DPM w/ IPA dunk	VF 1 - or - DPM w/ IPA dunk			DPM w/ IPA dunk	VF 1 - or - DPM w/ IPA dunk Gentle Cycle	
PostProcess DEMI 910		-	2-6 min	2-6 min	Not recommended	2-6 min	2-6 min	2-4 min	-	2-6 min	2-6 min	2-6 min	Not recommended	
SOLVENT		99% IPA		99% IPA	50/50 99% IPA/PG	99% IPA		99% DPM w/ IPA dunk	99% IPA					
MAX EXPOSURE		15 MIN MAX		5 MIN MAX	3 MIN MAX	1 MIN MAX		4 MIN MAX	5 MIN MAX					
SUPPLEMENTAL WASH METHODS	SWABS	YES		YES	YES					WITH CARE		NO Exception: see TOUCH UP below		
	COMPRESSED AIR CABINET	YES		YES	YES	WITH CARE		YES					NO	
	SPINNER	YES		YES	NO	YES					NO			
WASHING STEPS	NOTES	Wash in dedicated solvent to preserve white/color.		-	Parts susceptible to chipping in platform removal.	Handle green state parts delicately.		Wash within 4 hours of printing for best results. IPA dunk within 5 MIN of final DPM wash. Let dry 5 min after wash before handling.		Wash in dedicated solvent to preserve white.		Wash asap after printing for best results. Wash parts on platform to prevent warping. Fully dry solvent after wash before handling.	Wash parts on platform. Handle green state parts delicately.	
	PRE-WASH	Optional		Optional	Recommended			Optional	Optional	Optional	Optional	Optional	Drain for 30 MIN	
	ORBITAL WASH	1) 5 MIN at 180 +/- RPM 2) FRESH IPA & 10 MIN MAX at 180 +/- RPM		5 MIN MAX at 140 +/- RPM	3 MIN MAX at 120 +/- RPM	1 MIN MAX at 120 +/- RPM		4 MIN MAX at 150 +/- RPM	5 MIN MAX at 130 +/- RPM			5 MIN MAX at 140 +/- RPM	5 MIN MAX at 80-100 RPM	
	RECOMMENDED BREAKDOWN (adjust as needed)	FIRST WASH	5 MIN at 180 +/- RPM		3 MIN at 140 +/- RPM	1 MIN at 120 +/- RPM	30 SEC at 120 +/- RPM		1-2 MIN at 150 +/- RPM	2 MIN at 130 +/- RPM			2 MIN at 140 +/- RPM	5 MIN at 80-100 RPM.
		MID-WASH TOUCH UP	Compressed air cabinet			Compressed air cabinet	Spinner		Compressed air cabinet	Compressed air cabinet			Compressed air cabinet	-
SECOND WASH	FRESH IPA 5 MIN at 180 +/- RPM		FRESH IPA 2 MIN at 140 +/- RPM	As needed 1-2 MIN at 120 +/- RPM	30 SEC at 120 +/- RPM		1-2 MIN at 150 +/- RPM (then IPA dunk)	2 MIN at 130 +/- RPM			2 MIN at 140 +/- RPM	-		
TOUCH UP		Swabs			Swabs or wipes	Spinner		Swabs					Swab platform contacting surfaces with IPA.	
Or any compatible SUPPLEMENTAL WASH METHOD														
DRY		Air dry or with compressed air.				Air dry or with compressed air.						Air dry		

SCRAPER BLADE SAFETY

The scraper blade is very sharp. To prevent injury, always cut away from your body. If you do cut yourself, remove gloves immediately, wipe resin from skin and wash with soap and cold water for 10 min. **If the cut is serious, seek medical attention immediately.**

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CURE START	Within 15 HRS of printing			Within 15 HRS of printing	Within 24 HRS of printing		Within 8 HRS of printing	Within 15 HRS of printing				Within 16 HRS of printing
UV	DYMAX 5000-ECE	30 SEC/side in 15 SEC doses with 15 SEC of cooling time between	60 SEC/side in 20 SEC doses with 20 SEC of cooling time between. Repeat wash/cure in fresh IPA to remove tackiness.	5 min/side on middle rack							FOR SALT BAKE ONLY: 5-10 SEC/side to cure outside of part before using salt	-
	OPTICURE LED CUBE or APM LED UV-Cube II	30 SEC/side	60 SEC/side Repeat wash/cure in fresh IPA to remove tackiness.	15 min/side on top rack								-
	PCU 90 (requires Nitrogen)	4 MIN/side Upper level setup with displacer	8 MIN/side Lower level setup	15 MIN/side Upper level setup with displacer & nitrogen purge before curing								
THERMAL	SALT BAKE	-	-	NO			YES Pack between 30-150 MINS to minimize salt sticking to part. Salt pack earlier to minimize warping.	YES				NO
	OVEN PROGRAM	-	-	Program 1 Pattern 1	Program 3 Pattern 2		Program 1 Pattern 1	Program 3 Pattern 3	Program 2 Pattern 1	Program 3 Pattern 1	Program 2 Pattern 2	Program 3 Pattern 2
	TIME & TEMP	-	-	12.5 HRS at various temps	8 HRS at 120 °C		12.5 HRS at various temps	12 HRS at 120 °C	4 HRS at 100 °C	4 HRS at 120 °C	15 HRS at various temps	8 HRS at 120 °C
	COOL DOWN	-	-	Inside oven 1-2 HRS	Inside oven 1-2 HRS or outside oven 0.5-1 HR		Inside oven 1-2 HRS	Inside oven 1-2 HRS or outside oven 0.5-1 HR				Inside oven 1-2 HRS or outside oven 0.5-1 HRS
CASSETTE MAINTENANCE					SCRAPER BLADE SAFETY					QUESTIONS? CONTACT US!		
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