CORATEX... simply better purging!

Temperatures / Proportions

Type of Plastic		Processing- Temperature Range		Purging Temperature Range		Screw Diameter			
						CORATEX proportion in the Pur-			
		[°C]	[°F]	[°C]	[°F]		ging	Mix	1
						in %	in g/ kg	in %	in g/ kg
Acrylnitrile-Butadiene-Styre- ne Copolymer	ABS	200 - 250	390 - 480	170 - 190	340 - 375	2 - 3	25 - 35	3 - 4	35 - 50
Acrylonitrile-Copolymer	SAN	200 - 220	390 - 430	180 - 200	355 - 390	2 - 3	25 - 35	3 - 4	35 - 50
Cellulose-Acetate	CA	220 - 260	430 - 500	190 - 230	375 - 445	2 - 3	25 - 35	3 - 4	35 - 50
PEEK	PEEK	370 - 390	700 - 735	340 - 360	645 - 680	2 - 3	25 - 35	3 - 4	35 - 50
Polyamide	PA	250 - 280	480 - 535	220 - 230	430 - 445	2 - 3	25 - 35	3 - 4	35 - 50
Polycarbonate	PC	280 - 330	535 - 625	230 - 280	445 - 535	2 - 3	25 - 35	3 - 4	35 - 50
Polyester	PET	180 - 220	355 - 430	150 - 200	300 - 390	2 - 3	25 - 35	3 - 4	35 - 50
Polyester (linear)	CPET	230 - 300	445 - 570	200 - 250	390 - 480	2 - 3	25 - 35	3 - 4	35 - 50
Polyethylene	HDPE/ LDPE	180 - 250	355 - 480	150 - 190	300 - 375	2 - 3	25 - 35	3 - 4	35 - 50
Polymethyl-Methacrylate (Plexiglas)	PMMA	210 - 230	410 - 445	180 - 200	355 - 390	2 - 3	25 - 35	3 - 4	35 - 50
Polyoxymethylene	POM	170 - 210	340 - 410	140 - 170	285 - 340	2 - 3	25 - 35	3 - 4	35 - 50
Polypropylenel	PP	200 - 250	390 - 480	170 - 200	340 - 390	2 - 3	25 - 35	3 - 4	35 - 50
Polystyrene	PS	200 - 270	390 - 520	170 - 210	340 - 410	2 - 3	25 - 35	3 - 4	35 - 50
Polysulphonate	PSU	350 - 400	660 - 750	320 - 350	610 - 660	2 - 3	25 - 35	3 - 4	35 - 50
Polyvinylchloride*	PVC	160 - 180	320 - 355	140 - 160	285 - 320	2 - 3	25 - 35	3 - 4	35 - 50
Polyvinylidene Fluoride	PVDF	200 - 220	390 - 430	180 - 200	355 - 390	2 - 3	25 - 35	3 - 4	35 - 50
Thermoplastic Polyurethane	TPU	200 - 220	390 - 430	180 - 200	355 - 390	2 - 3	25 - 35	3 - 4	35 - 50



* Tech Tip: when purging a machine used for PVC, we recommend to use PP as the purging material carrier; please refer to our special application guide for more information. Quantity required for purging mix with CORATEX and CORATEX HT

Screw dia. in mm in inch	20 - 40 0.75 - 1.5	40 - 50 1.5 - 2	50 - 60 2 - 2.5	60 - 80 2.5 - 3	80 - 100 3 - 4	100 - 120 4 - 4.5	120 - 150 4.5 - 6	150 - 175 6 - 6.5	175 - 200 6.5 - 8
Recommended in kgs ¹ in lbs	0,5 - 1 0.3 - 2.2	1 - 3 2.2 - 4.3	3 - 5 4.3 - 7.5	5 - 10 7.5 - 18	10 - 25 18 - 35	25 - 35 35 - 60	35 - 70 60 - 117	70 - 90 117 - 186	90 - 150 186 - 280

1) Approximate values; depending on screw configuration and degree of contamination.

Suitable for all known commercially available polymers and processing temperatures up to 400°C / 750°F.

CORATEX can be as valuable for manual cleaning as it is for purging.

CORATEX is also extremely suitable as a polishing agent for tools, moulds and stainless steel surfaces.

www.coratex-emulsion.com

1/2 Our path to better purging the with CORATEX Time $\frac{1}{2}$ the Energy **CORATEX** purges: **CORATEX** enhances: **CORATEX** eliminates: Stubborn contamination and material oxidization traces.

CORATEX offers: Low cost purging and easy handling.

CORATEX is: Physiologically safe when used according to directions.

CORATEX is used for: ABS, CA, PMMA, PA, PC, PET, HDPE, LDPE, PEAK, POM, PP, PS, PSU, PVC, PVDF, SAN, TPU etc.

Your local distributor:

CORATEX 09.2011

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Versatile



CORATEX

CORATEX ... simply better purging!

General information about CORATEX and CORATEX HT

CORATEX is a purging emulsion for plastics processing machines. It is primarily used for colour- and material changes, in preparation of preventive maintenance programs, for the removal of polymer degradation ("black specks") and during machine start-up after closing down. It will give outstanding cleaning results on all relevant components such as screws and barrels, including heads and dies of extruders and nozzles, hotrunner tooling of injection moulding machines.

In addition to its purging properties CORATEX HT is very popular for manual cleaning of individual machine components.

CORATEX (Art.-No. 66261030130 - one packing unit of 10 bottles, 800 ml each bottle) and CORATEX HT (Art.-No. 66261030549 - one packing unit of 10 bottles, 800 ml each bottle) are mixed with your polymer and applied under reduced process temperatures (see right side information). For remote destinations please ask for special overseas packaging.

Cleaning with CORATEX: a successful concept that pays off!

The uniqueness of CORATEX is based on 3 pillars:



Typical applications for CORATEX:

CORATEX and CORATEX HT are concentrated liquids which can be used with all types of polymers.

- Typical applications for cleaning/ purging:
 - > extrusion lines, such as as compounding, pipe, sheet, profile, cable, master batch
 - > injection moulding machines with conventional or hotrunner tooling
 - Film blowing and blow moulding machines
 - > ... and manual polishing for the final touch.



CORATEXING

One diagram covering the preparations of various machine configurations for best results for all thermoplastic raw materials. For machines using PVC please refer to our application instructions.



Alternative to change of temperatures: Use lower meltflow material when mixing with CORATEX for purging.

Process steps*

Preparation Check your machine parameters and ensure free access of purge mix into the machine hopper. The hopper should be free of loaders, driers and the like, to allow the purge mix to be fed directly onto the screw.
Temperature settings According the specific thermoplastic material, approximately 10-15% under normal processing temperatures, see Temperatures / Proportions table. Alter- natively the use of lower melt flow material as carrier for Coratex may allow the processing temperature to be left at normal processing temperature, when purging. In either case it is advisable not to reduce the die temperature.
Preparation of the purging mixture Ensure that the polymer granules are evenly coated with Coratex and that any lumps are avoided. Also ensure that the correct ratio of Coratex to plastic gra- nules is adhered to.
Purging process Reduce the screw speed to 50% or lower and let the purging mixture run through.
Flushing After purging flush your machine with virgin material.
Control If required repeat steps 2-5 once more. In the event that the anticipated result is not achieved, a strip-down of screw, head and nozzle parts combined with manual cleaning using Coratex in neat form, may be required.
On completion Check for and remove any remaining coated granules in the feed section and change over to normal production temperatures before commencement of the next production run of the machine.

Examples showing the value of using CORATEX

	Example 1: CORATEX compared to disassembly (strip down) of an extrusion line								
l	cost center	purging with CORATEX mix	strip down	your cost advantage					
	Labour	2h incl. re-start	8h incl. disassembly and manual cleaning	6h at € 200 = €1,200					

Example 2: CORATEX with an injection moulder having a Ø 100mm Ø single screw

cost center	purging with CORATEX mix	purging with a compound- ed, granular purge material	your cost advantage
Purging material	4% CORATEX mixed into 25kg of polymer approx. €80	purging material in granu- lar form incl. transport cost approx. €550	approx. €470 and far less storage space required

* simplified; for detailed information consult your CORATEX distributor or refer to our application guidelines on www.coratex-emulsion.com