

Plating On Plastics (POP) Process catalogue
Version 8
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CLEANER CRVI

Characteristics	Process Name	Description / Key Features	Operation parameters	Ecology
Slightly alkaline	SILKEN CLEANER 201	For ABS, ABS/PC (<45% PC), PP and PA	2 - 5 min	
Solvent based	SILKEN CLEANER 202	For ABS/PC (>45% PC)	1 - 10 min	Contains gamma-butyrolactone

ETCH CRVI

Characteristics	Process Name	Description / Key Features	Operation parameters	Ecology
Additive for low Cr etching	SILKEN ETCH 301	For ABS, ABS/PC (<45% PC) and PP. Not for PA	2 – 30 min	Low Cr process
Wetting agent	SILKEN WET 302	Surface tension reducer for Cr etching baths		PFOS-free based
Wetting agent	SILKEN WET 303	Surface tension reducer for Cr etching baths		PFOS-free based contains CrO ₃
Wetting agent	SILKEN WET 322	Surface tension reducer for alkaline etching baths		PFOS-free based
Additive for etching PA	SILKEN ETCH PA 310	Non Cr etching for PA	5 - 15min	Cr(VI)-free

ETCH NON-CHROME: SILKEN BOND

Characteristics	Process Name	Description / Key Features	Operation parameters	Ecology
CLEANER	SILKEN BOND CLEANER	Sweller before Non Chrome Etch (contains solvent)	1 - 10 min	Contains gamma-butyrolactone
ETCH	SILKEN BOND ETCH	Non Chrome VI Etching process	10-20min	Cr VI Free PFOS Free Low Permanganate content
NEUTRALIZER	SILKEN BOND NEUTRALIZER	Neutralizer after Non Chrome Etch	2-5min	
RACK PROTECTION	SILKEN BOND PROTECT	Rack protector for Non Chrome Etch	2-5min	
CONDITIONER	SILKEN BOND CONDITIONER	Activator for Non Chrome Etch	1-2min	Non- hazardous

NEUTRALIZER CrVI

Characteristics	Process Name	Description / Key Features	Operation parameters	Ecology
Powder form	SILKEN NEUTRALIZER 401	Neutralizer after etching baths	2 - 5 min.	Non-corrosive, non-hazardous
Liquid form	SILKEN NEUTRALIZER 404	Neutralizer after etching baths	2 - 5 min	

CATALYST

Characteristics	Process Name	Description / Key Features	Operation parameters	Ecology
Pd/Sn colloids	SILKEN CATALYST 501	4 g/L Pd. Highly stable colloids	1.5 - 6 min	
Pd/Sn colloids	SILKEN CATALYST 502	2.65 g/L Pd. Highly stable colloids	1.5 - 6 min	
Sn(II) additive	SILKEN CATALYST SN	Stabilizer for Pd/Sn colloids baths		
Pd/Sn colloids	SILKEN CATALYST 509	9 g/L Pd. Highly stable colloids Catalyst for Non chrome Etch on 2k parts	3-8min	
Ionic Palladium for PA	SILKEN CATALYST PA 510	5g/L Pd. Ionic palladium	5 - 15min	

ACCELERATOR

Characteristics	Process Name	Description / Key Features	Operation parameters	Ecology
Powder form	SILKEN ACCELERATOR 601	No precipitates with hard water	2 - 5 min	
Liquid form	SILKEN ACCELERATOR 602	Simple make up & replenishment Less Pd consumption in Catalyst No precipitates with hard water	2 - 5 min	
Liquid form for PA	SILKEN ACCELERATOR PA 610	Only for PA	1 - 3min	

ELECTROLESS NICKEL

Characteristics	Process Name	Description / Key Features	Operation parameters	Ecology
Ammonia Free	SILKEN METAL 703	Highly stable EN	6 – 15 min	Lead free, Cadmium free RoHS compliant
Ammonia -based	SILKEN METAL 709	Highly stable EN Sulfate	6 - 15 min	Lead free, Cadmium free RoHS compliant
Ammonia based	SILKEN METAL 710	Highly stable EN 2 Component Replenish Chloride	6 - 15 min	Lead free, Cadmium free RoHS compliant

IMMERSION COPPER

POST RINSE

Characteristics	Process Name	Description / Key Features	Operation parameters	Ecology
Immersion Copper	SILKEN CU 801	Copper immersion process for plastics, applied after electroless Ni	1 - 5 min	

Characteristics	Process Name	Description / Key Features	Operation parameters	Ecology
Provides hydrophobic surface	SILKEN DRY 901	Accelerates the drying process Only used as a final finish step	1 - 3 min	
Provides hydrophobic surface	SILKEN DRY 902	Accelerates the drying process	1 - 3 min	