Indium WS-554-89-4

The following cleaning testing has been conducted in ZESTRON® technical centers. Prior to recommendation by Indium, the board cleanliness level has been assessed successfully in accordance to the following standards:

- IPC 610
- J-STD 001
- IPC-TM 650

Flux Removal in an Aqueous Cleaning Process:

	Inline Cleaning Process				
Cleaning Agent	**Conc.**	**Conveyer belt speed**	**Cleaning temperature**	**Rinsing agent**	**Drying**
VIGON® A 201	**15%**	**1.4 feet / min.**	**135°F / 57°C**	**DI-water**	**Circulating air**

Inline cleaning processes are usually recommended for high throughput. With a non-foaming cleaning agent such as VIGON® A 201, the high-pressure process is a must for versatility and speed.

	Batch Cleaning Process				
Cleaning Agent	**Conc.**	**Cleaning time**	**Cleaning temperature**	**Rinsing agent**	**Drying**
VIGON® A 200+	**15%**	**10 min.**	**135°F / 57°C**	**DI-water**	**Circulating air**

Batch cleaning processes are renowned for their small footprint and are mostly recommended for high mix/low volume production.

	Ultrasonic Cleaning Process				
Cleaning Agent	**Conc.**	**Cleaning time**	**Cleaning temperature**	**Rinsing agent**	**Drying**
VIGON® US	**15%**	**10 min.**	**135°F / 57°C**	**DI-water**	**Circulating air**

Ultrasonic cleaning processes are most effective with hard substrates such as ceramics. The low surface tension value of VIGON® US makes it ideal to clean underneath BGA's and Flip-Chips.

OVER→

APPLICATION NOTE

Form No. 98456 R0

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APPLICATION NOTE

Flux Removal in a Semi-Aqueous Cleaning Process:

	Ultrasonic Cleaning Process				
Cleaning Agent	**Conc.**	**Cleaning time**	**Cleaning temperature**	**Rinsing agent**	**Drying**
ZESTRON® FA⁺	**100%**	**10 min.**	**135°F / 57°C**	**DI-water**	**Circulating air**

Ultrasonic cleaning processes are most effective with hard substrates such as ceramics. ZESTRON® FA⁺'s high bath loading capability, when compared to traditional solvents, ensures an extended bath life and is a very cost effective process.

Solder Paste Removal in an Aqueous Cleaning Process:

	Spray in Air and Ultrasonic Cleaning			
Cleaning Agent	**Cleaning time**	**Cleaning temperature**	**Rinsing agent**	**Drying**
VIGON® SC 200	**5 min.**	**68°F / 20°C**	**Not required**	**Circulating air**

Automated stencil cleaning processes typically provide reliable and reproducible cleaning results. VIGON® SC 200 is designed to remove unreflowed solder paste as well as adhesive in heated and unheated stencil cleaning systems.

Application recommendations are intended to serve as a guideline only. For additional cleaning process recommendation or to request a free cleaning trial, please contact ZESTRON®:

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