

# Vulkan In-Torch Nebulizer

## Suggested Operating Conditions

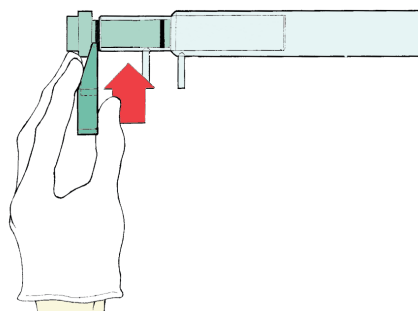
RF Power : 1400 Watts, approx.  
Outer argon flow : 15 L/min.  
Intermediate flow : 1.0 L/min.  
Nebulizer flow : 0.3 L/min.  
Sample uptake rate: 0.05 mL/min.



These above conditions are only for reference and may not be ideal for all instruments. Please also note that the Vulkan tip should remain at least 5mm recessed from the inner tube of the torch in order to prevent damage from the heat of the plasma.

## Disassembling

Carefully remove Vulkan from the torch adaptor by slowly pulling it away from the adaptor. Remove the plastic adaptor from the torch by placing the SDT extractor tool between the quartz torch and adaptor. Gently lever back and forth pushing carefully towards the thickest part of the tool. This will loosen the adaptor enough to be extracted by hand.



## Caution

Always ensure quartz/glass components have cooled sufficiently before handling as they remain extremely hot for minutes after being removed from plasma. During handling of these brittle materials, it is advised that cotton gloves be worn to protect both your hands and the quartz/glass.

## Limited Warranty for Vulkan In-Torch Nebulizer

The Vulkan is not covered by the normal Glass Expansion NO-RISK GUARANTEE. This product is not designed for routine analysis. It is designed for special applications and it is expected that users will be experienced and skilled ICP operators. By the nature of the applications, the Vulkan can be easily damaged. It is particularly important that the tip of the Vulkan be at least 5mm back from the end of the torch inner tube. If you are in any doubt regarding the operation of the Vulkan, please contact Glass Expansion. Glass Expansion will not accept return of a Vulkan that is damaged in any way. A credit or refund will only be provided if the product is returned in as-new condition.



**GLASS EXPANSION**

Quality By Design

**International**

Glass Expansion  
15 Batman Street  
West Melbourne VIC 3003  
Australia

Telephone: +61 3 9320 1111  
Toll Free (Aust): 1800 777 638  
Facsimile: +61 3 9320 1112  
Email: [enquiries@geicp.com](mailto:enquiries@geicp.com)

**Americas**

Glass Expansion  
4 Barlows Landing Road  
Unit 2A  
Pocasset, MA 02559, USA

Telephone: 508 563 1800  
Toll Free: 800 208 0097  
Facsimile: 508 563 1802  
Email: [geusa@geicp.com](mailto:geusa@geicp.com)

For your nearest Glass Expansion distributor, visit our website at [www.geicp.com](http://www.geicp.com)